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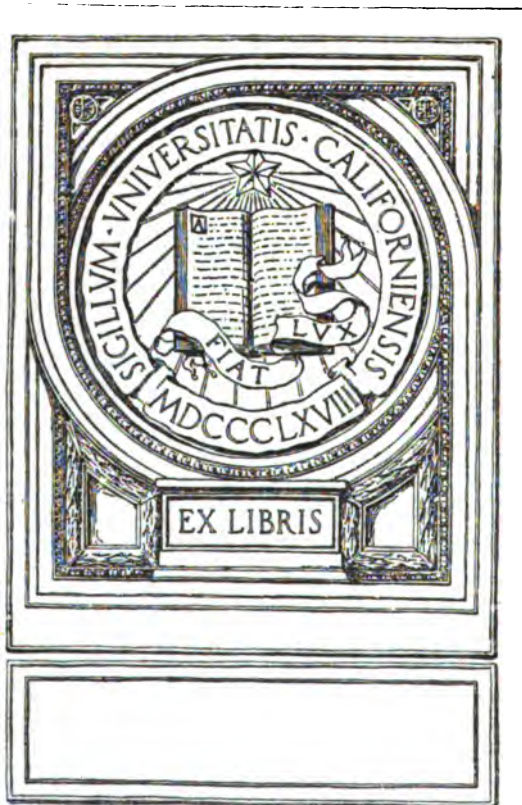
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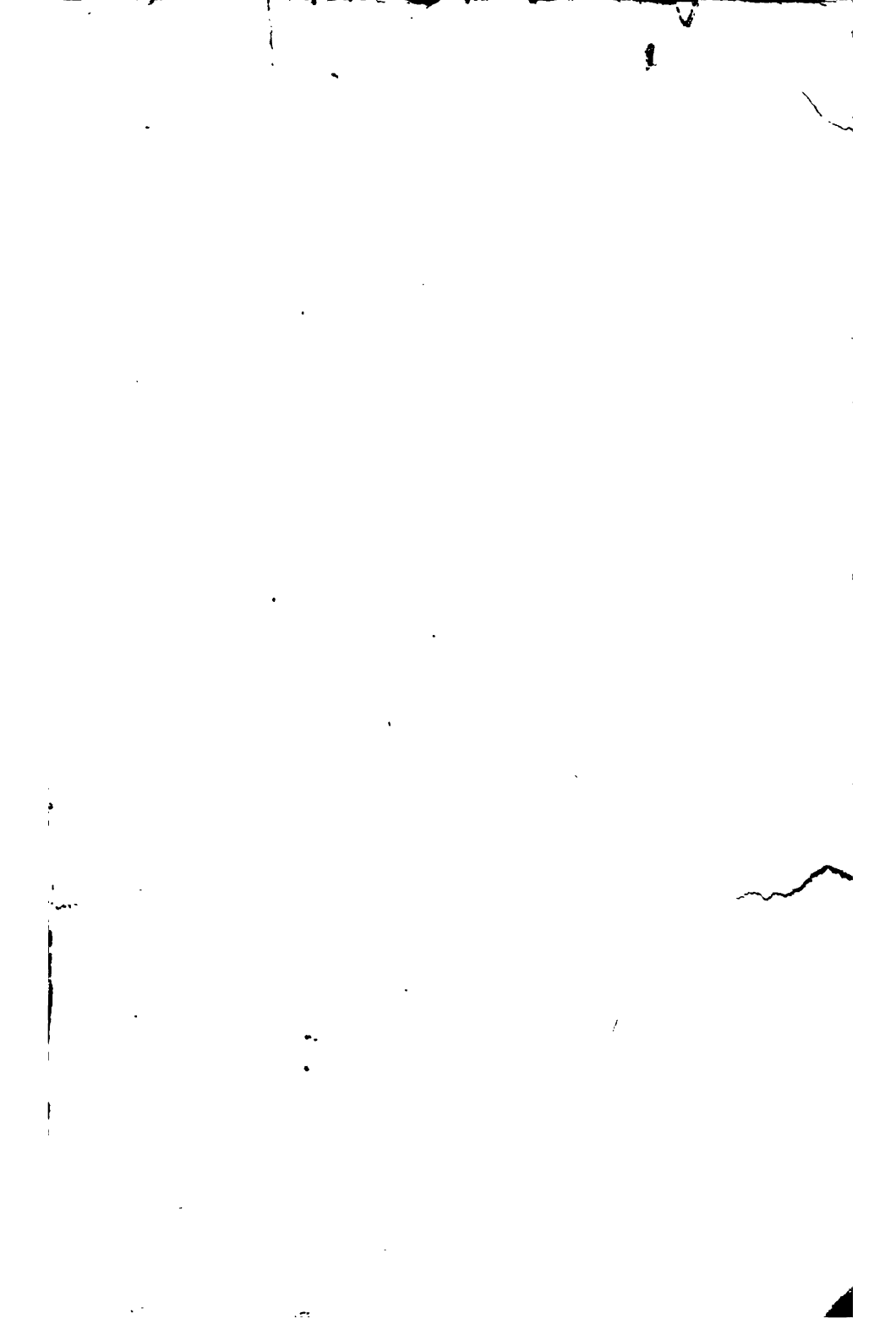
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173

29

1

AGRICULTURAL INSURANCE

IN ORGANIC CONNECTION WITH

SAVINGS-BANKS, LAND-CREDIT, AND THE
COMMUTATION OF DEBTS

BY

P. MAYET

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TRANSLATED FROM THE GERMAN

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PREFACE TO THE GERMAN EDITION.

The following work on "*Agricultural Insurance*" and such complements of the latter as seem to be requisite *in order to improve the condition of the Japanese agriculturist*, was originally composed in the spring of 1886; by the order of His Excellency Viscount NOMURA, Vice-Minister of the Department of Communications, for His Excellency Count YAMAGATA, Minister of the Interior. The part which in this series of projects, is assigned to the *Parochial Post-Office Savings' Banks*, shows the point of contact with the interests of the Department of Communications, with which the *Post-Office Savings' Bank* is connected. It is owing to this and to another circumstance, viz., that I myself belong to the Department of Communications, that the work undertaken for the Ministry of the Interior was printed by order of the Ministry of Communications.

My work must be considered only as a preliminary survey of the subject, and requires for its completion a considerable series of special works. However during the last eleven years I have already written a few preliminary essays. Amongst these the following will be found to be directly or indirectly connected with the matter in hand.

(I.) "*The Reduction of the Land-tax*" (1878); and "*The Introduction of the Monopoly on Sake*" 1879.

A private paper translated into Japanese by Dr. T. Hirata, laid before the Department of Finance; not yet published. The first part forms Appendix III of the present work.

I prophesied in the first part, as I mention in § 38 of "*Agricultural Insurance*" that the *indebtedness of the Japanese agriculturist* which has in the meantime come into notice, would be unbearable, (cf. pp. 233—236); already at that date I pointed to *Insurances against Fire, against loss of cattle, and injuries caused by storms*, as means of providing against many an agricultural distress, and recommended a *reform of the Fiscal System*, which should lay a heavier share of burdens upon the non-agricultural portions of the population (Income-tax &c). The second part of the work showed the ways and means to procure ample financial means for the purpose of diminishing the landtax, by proving that the clear profit arising from the Monopoly of Sake which I recommended would be at least 14½ million yen. This proposal did not indeed bring about the monopoly; nevertheless, since that time the tax on sake has been several times noticeably increased. (Sake-tax, Budget 1878-9, 3½ million yen. 1886-1887, 14.8 million yen).

(II.) *A Bill for the introduction of a Land Tax Deficiency Fund.*—In the work above mentioned, No. 1, I had recommended the introduction of a Land Tax Deficiency Fund, with the double purpose of insuring a uniform

Income from the Land Tax, and of aiding the Agriculturist after accidents or failures of crops. By the order of H. E. Count OKUMA SHIGENOBU, then Minister of Finance I submitted to him this project of law at the end of December 1879. The name was changed to "*Agricultural Distress Fund*," but the purposes recommended by me were retained, and the project received the sanction of law, 15. June 1880. During the first $5\frac{1}{4}$ years of its operation this Fund aided 880,000 families with money for houses, agricultural implements, seed-corn or for the payment of the land-tax, also it provided $3\frac{1}{4}$ millions of people with money for the necessities of life, besides acquiring property to the amount of 11.2 million yen. A fuller description of the constitution and operations of this Fund, will be found in Appendix IV of the present publication. I therein undertake to show the importance of these funds as bases for the practical introduction of Agricultural Assurance.

(III.) *Collective Insurance of Buildings in Japan.*

Paper read before the German Asiatic Society in Tokyo, 13. April 1878, printed in No. 16 of the Transactions of the Society. It also appeared in French, English and Japanese Translations. For purposes of practical investigation of this project a Fire Insurance Office was established in the Finance Department, under the direction of Dr. Hirata.

The leading idea of Collective Insurance was to protect the Japanese house with *one collective insurance*, against all possible acute dangers:—fire, earthquake, typhoon, inundation, war, &c. The fact that the agricultural distress fund in $5\frac{1}{4}$ years gave help for houses

to 334,000 families; and that of these houses only 27.5 per cent had been destroyed by fire, the remaining 72.5 per cent having been destroyed by other natural causes; points to the correctness of the ideas then expressed. The leading thought also of "Agricultural Assurance," of which House-Insurance must form a part, is the *insurance of property against all kinds of danger.*

(IV.) *A Fire-Insurance Bill.* In spite of the less comprehensive title this also brought within the circle of insurance *the other acute risks* which threaten buildings. It was elaborated conjointly, with, and *accepted* by, a Commission formed under the Presidency of the Finance Minister, at first H. E. Count Okuma, and afterwards H. E. Viscount Sano Tsunetami. The members of this Commission were H. E. Viscount Shinagawa Yajiro, then Vice-Minister of the Interior, H. E. M. Matsuda, late Governor of Tokyo, Mr. Ishii, then Chief of the Police, Dr. T. Hirata, and a number of officials belonging to the Finance and Home Departments and the Tokyo Fu, also myself. This project was signed in the Autumn of 1881 by H. E. Viscount Sano, then Minister of Finance, and submitted to the Daijokuwan, but, after the retirement of Count Okuma and Viscount Sano from the Cabinet, it was withdrawn in May 1882 by Count Matsukata who succeeded to the Ministry of Finance. Not published. The following numbers V. VI. VII., are connected with and supplementary to it.

(V.) *A Bill containing Statutes of a State bank with mortgage debentures, for the granting of mortgage loans on*

insured, solidly-built buildings: worked out conjointly with Dr. Hirata, in the spring of 1882. Not published.

(VI.) *The protection of Tokyo against fire.*

Two papers read before the German Asiatic Society, 18. Feb, and 12. March, 1881. Translated into Japanese by Mr. R. Yamagata. Submitted to the Finance Department. Not yet published.

(VII.) *Proposals for the erection of a Fire Brigade School, with a view to the organization of a better system of protection for towns and villages.* Sanctioned by the Commission mentioned under No IV. Not published.

(VIII.) *The "First Japanese Credit Foncier: a project for the Kazoku Kai Kan."* Aug. 1882.

A Japanese translation of this book by Mr. Hanabusa, printed for circulation among the members of the Cabinet, and of the Nobles' Club, appeared in the beginning of 1883. The most essential part of this paper is a demonstration of the usefulness and the organization of a Land-Credit-Institution with mortgage debentures; but the only portion containing new matter for European readers is an "*Enquiry into the Development of Japanese Agriculture in the period of Meiji*," forming the substance of a not yet published paper read before the German Asiatic Society, 20. Dec. 1882. The conclusions arrived at in this enquiry were *that on the whole Japanese Agriculture was in a state of prosperous development, and especially that after years of affluence the increase of cultivated area has been far greater than the increase of population.*

(IX.) *The organization of the Provincial Finances by the aid of a Fu-Ken-Bank, and the colonization of the Hokkaidō with the aid of a Colonization Bank.*

Lecture delivered in July 1883 before H. E. Count YAMAGATA ARITOMO; translated into Japanese by Mr. N. Hanabusa. This lecture was the cause of the composition of the first and fourth chapters of the "*Developments*" added by special desire to the Appendix of the present work (cf. § 12 of "*Agricultural Assurance*"). Also that part of it which treats of the Colonization of Hokkaidō forms in an abbreviated shape the Part II of the same Appendix.

(X.) *Postal School Savings Banks.*

Written January 1886, translated by Mr. N. Omura, and published in Japanese by the *Educational Society of Japan*, April 1886; at present being submitted for examination to the Department of Communications. Point of contact with the agricultural question:—*Parochial Post Office Savings' Banks* to be established on the same system.

I explicitly develop in this paper a simplified and cheaper system for the administration of the School Savings' Banks (*Mayet-Ratkowski System*) by the introduction of localized tokens stamped with the year date, issued from the Central Post Office Savings' Bank, and redeemable with the compound interest added. A leading article in the *Japan Mail* for 21. July 1886, which criticized the book, and gave the general outlines of the technical arrangements closed with the words:— "Such is the system in outline; an incomparably easier and less laborious system than that pursued in any European country. Mr. Mayet's book contains every detail required for putting the scheme into operation, with rules and directions for every possible contingency. We believe that, if Japan adopts this plan, she will stand at the head of all countries in the matter of School Savings' Banks, and will very probably have the pleasure of seeing her methods imitated in the West." On this new system, which is especially applicable for cases in which a limited number of persons live together for a certain time in an organized local community (in School, Village, Ship, Company, Factory, Association &c.), and where a *portion* of the interest may be conveniently devoted to the *whole body* of these persons, while the rest accumulates for the individuals, I hope

during the following year to be able to publish an exposition in the German language.

(XI) *Japanese Famines*.—A paper, read before the German Asiatic Society, 27. Jan. 1886. Gave a catalogue of Japanese Famines since the year 567 A.D. with accompanying historical remarks, and deduced, from the Japanese materials compared with the agricultural history of Sweden, France, England and Prussia, the conclusion *that there must be some natural cause for the fact that periods of several years of abnormal climatic character show themselves for the same countries in a degree far exceeding mathematical probabilities*. During the next year I propose to publish this paper in an enlarged form with the title "*Japanese Famines and Climatic Periods*."

I deemed it necessary to allude to this considerable array of preliminary works accomplished (to say nothing of the about equal number of essays which yet await completion and are not mentioned here), as implying a more than ten years occupation on this subject, in order to give the reader of the present extensive proposals the confidence that on my part I have paid due attention to the three subjects therein considered—viz., Insurance, Land-Credit, and Savings Banks. Also I hope that the offices which I have formerly held as Counsellor to the Financial Section of the Privy Council, Counsellor to the Financial Department, and Adviser to the Ministry of Agriculture, Industry and Commerce, will have given

me enough insight into the economical and fiscal circumstances of modern Japan, as to prevent me from making any untenable proposals.

For one part of my work, namely Appendix I, Chap. II "The Commutation of a part of the Lease-rents with the assistance of Arbitration Courts and of the Provincial Land-Credit Institutes," I have been able to draw from valuable Japanese work. The description which I give at the beginning of that chapter of Japanese Leases is principally based upon 17 reports on the different kinds and the duration of leases, the amount of rent, the participation of the lessor in the harvest, the right of eviction, the size and the desirable size of the farms,—papers which were sent from different provinces, to the Kōjunsha (Mutual Improvement Society) by various members of that association and which were published during the years 1880 and 1881 in No. 32—48 of the Kōjunzasshi, the organ of that Society.

It gives me great satisfaction and pleasure publicly to express my deepest obligation to those numerous Japanese gentlemen whose unwearied kindness and assistance given officially or unofficially, in various places by collecting materials, giving information about Japanese circumstances, granting permission to inspect and use documents, reading through Japanese and Chinese books, making translations from German into Japanese and vice versa, has made them consciously or unconsciously my coadjutors in this work.

Especially I would mention the following gentlemen :

Viscount Y. Shinagawa, Councillor, formerly Vice-Minister of the Interior, also of the Department of Agriculture, Industry and Commerce, and formerly Japanese ambassador to Berlin.

Dr. T. Hirata, Head of Department in the Legislative Bureau.

Mr. T. Wada, Director of the Imperial Geological Bureau.

Mr. H. Ishii, Governor of Miye Ken.

Mr. Y. Matura, Keeper of the Archives in the Department of Communications.

Mr. Y. Terada, Principal of the German Section of the Tokyo First Higher Middle School.

Mr. N. Hanabusa, Secretary to the Privy Council.

Mr. T. Saito, Translator in the Department of Communications.

Mr. J. Watanabe, Translator in the same Department.

Mr. N. Omura, Teacher in the Nobles' School at Tokyo.

Mr. R. Yamagata, Teacher in the Higher Middle School at Kumamoto.

Especially am I indebted to Messrs. *Matura*, *Saito*, and *Watanabe* for their careful and accurate translation of the present work into Japanese, and to the Kokubunsha Printing Company for the painstaking care with which they have set up the types. This will be better understood when I mention that all the composition was done by Japanese compositors who understood no German.

I hope that for fellowworkers in my German home

who like myself are seeking after *efficient measures for protecting the peasantry*, this work may be an incitement to investigate the working of the Agricultural Distress funds, and to adopt at home a *systematic organization of agricultural assurance* such as is here treated of in its Japanese aspect.

As at this distance I cannot possibly hope to see the notices of the book which may appear in the various special magazines and reviews in Europe, my critics and friends would do me a great favour by sending reviews and criticisms to the care of Mr. R. L. Prager, Bookseller and Publisher, Berlin.

Tokyo, 1. July, 1888.

P. MAYET.

PREFACE TO THE ENGLISH EDITION.

"Political Wisdom, in our opinion, lies not so much in conservation, as in progress and growth. For the human race is as yet far from having attained its highest perfection."

Leopold von Ranke.

Works vol. xxiv. p. 288.

"On the Relationships and Differences between Historical Science and Politics."

"In Politics, as in every other form of activity, it still remains of the ultimate importance, to fix the eyes on the true interests of the subject, and to handle them with care and healthy common sense."

What is customary may be done in the customary manner. In order to bring about what is new it will be necessary to lose sight of precedents, and to fix the eyes solely upon the requirements of the circumstances, the inner necessities of the task. In such a case there arise for the well-ordered mind, full of living thought, original points of view which no counsellor could suggest to him, which no form of existence elsewhere could make dispensable for him. If he has first familiarized himself with the inward, the essence of the matter, the forms suggest themselves to him of necessity and quite spontaneously."

Leopold von Ranke.

Works. vol. xiii. p. 347.

"On Venetian history."

The economical system of every country in the world, without exception, is at present one-sided, and devoted more to the improvement of Industry and Commerce than to that of Agriculture. For the manufacturer and the merchant, Deposit Banks, Industrial and Commercial Banks, Lombard Banks, Discount Banks, Bonded Warehouses, &c., &c., with their manifold arrangements for credit and the circulation of money, facilitate *quick returns on their business capital*, facilitate for them *the extension and improvement of their business*. The manufacturer and the merchant have close at hand the media of communication,

Exchanges, Telegraphs, Railways, Steam Navigation; for Industry and Commerce are unfettered to establish themselves freely in places of intercourse; whilst the farmer from the location of his farm, is generally farther removed from those means of communication. The manufacturer and merchant can obtain abundant opportunities of insurance of goods and ships against the dangers arising from inclement weather during transport by land or by sea.

Agriculture, in every country in the world without exception, is at *an economical disadvantage* as compared with Industry and Commerce. This is no reproach, for it is the natural course of economic history that the means of intercourse should first develop themselves at the centres of intercourse, the towns. But it is *a warning* that the State and Society, public and private endeavour, should contribute their share towards hastening on the tardy development of those financial institutions which are for the benefit of the agriculturist.

It was not my intention in the present work to treat of the whole subject of the financial institutions desirable for agriculture. I have taken into consideration only one group in the system of economical institutions desirable for agriculture, the members of which, might and, in my opinion, should be organically connected with one another—, because this one group is of the greatest importance for the *pari passu* progress of the farmers. This subject embraces the institutions for agricultural *Insurance*, rural *Savings*, and agrarian *Mortgage-credit*.

The course of the investigation demonstrated that all three might advantageously be developed far beyond their present limits. The goods of the merchant when upon the sea, are insured against injuries from the inclemency of the weather ; with the exception of the altogether insufficient hail-insurance, such protection is denied to the crops of the farmer in the field. It is denied against storms and waterspouts, against frost and flood, against noxious insects and diseases of plants. The townsman and the inhabitant of larger villages has the Savings Bank at his door ; the farmer must go miles and miles in search of one ; —it should be our object to make them accessible in every village. In all civilized countries there exists a legislation on mortgaging ; but in every one of them, in consequence of actual banking arrangements, town property has the advantage over country property, and in the latter kind of property the large landed estate has the advantage over the yeoman's small property in the application of the mortgage loan. Everywhere money flows more into than from the centres of intercourse, both on account of the more complete financial facilities to be found there, and also from the circumstance that they are to a great extent the pleasure and luxury resorts of the inhabitants of the neighbouring country, that they are their customers and their business agents. The objection might here be raised that it is impossible for money always to flow more to the towns than from them. Such is nevertheless the case. The country becomes more and more indebted to the towns, and that indebtedness takes the most undesirable

form of private debts and private loans. This bad condition of things is increased by the fact that just in the last two decades, in consequence of modern transport developments, there has taken place a revolution unfavorable to the agriculturist. Formerly, if the farmers had bad harvests they could recoup themselves by higher prices; now, means of transport and grain trade are everywhere so developed that the towns never need allow the farmer his higher prices. They always buy their necessities of life cheap; in good years from the native farmers, in bad years from foreign farmers. The natural consequence in all countries is the same:—the prosperity of the towns, the backward condition of agriculture. We require institutions which shall cause the fertilizing stream of capital to flow back to the country, and diminish the fluctuations in the annual incomes of the farming class.

Not injury to the towns, but a development *pari passu* of agriculture is meant. And the towns themselves may expect from the increased prosperity of agriculture an increase in their own prosperity; for the neighbouring country districts are always the surest purchasers of the goods offered for sale by the towns. The more the buyer is in a condition to buy, the more he buys, the better he pays, the quicker and more certainly he settles. Hence increase of agricultural prosperity is undoubtedly increase of *national* prosperity. A large number of the industrial and commercial crises originate in the changing purchasing power of the farmers—native or foreign—who are the chief consumers of the manufactures.

The *general* problem of the rational organization of *every* national system of economics in respect to the institutions for insurance, accumulation of capital, and for mortgage credit, *as subservient to agriculture*, was the point which rose up before me as I carried out the task assigned to me with special reference to Japan.

It is true, I have in this matter confined my investigations to Japan alone, and have made its requirements, conditions and circumstances my starting point. But I was conscious that in the Japanese problem, in the task which was set me of making suggestions for improving the condition of the Japanese agriculturist, I had an instance before me of the universal problem. Could I succeed in laying the foundations of my proposals for Japan, not on the peculiar condition of that country, but on universal principles, my book would possess an interest far wider than Japan, a utility embracing other countries, an importance for the representatives of the agricultural interest everywhere.

The book has now put on an English dress in order that silently, and yet earnestly, it may lay before the statesmen, representatives, financiers and political economists of a greater number of nations, the important question whether in their countries all is being done in the way of Insurance, Savings Institutions, and Mortgage-Credit, that ought to be done for the improvement of agriculture.

The author hopes that the present work will prove a stimulus to such investigation and enquiry.

It would oblige him very much if references of all kinds to the subject,—should they be forthcoming—, reviews, critiques, leading-articles, transactions of associations and public representative meetings, works which favourably or unfavourably quote this book, were sent to him at Tokyo, Japan, by sympathisers or the reverse ; and he shall be very glad, if such a wish is signified, at once to return the price and postage of copies thus sent to him either in cash or in Japanese postage stamps.

P. M.

Tokyo, 12th Dec., 1891.

SUMMARY.

	PAGE
Preface to the German Edition...	III-XII
Preface to the English Edition...	XIII-XVIII
Summary ...	XIX
Agricultural Insurance in organic connection with Savings Banks, Land Credit and Commutation of Debts ...	1-136
Appendices. ...	137-388
I. Developments: ..	139-185
1. Evictions and Colonization.	
2. Commutation of Lease rents.	
3. Land Cultivation Annuity Banks.	
4. Communal Obligations.	
II. The Land-Credit Institute and its assistance in the organ- ized colonization of Hokkaido ..	187-215
III. The Reduction of the Land Tax ..	217-253
IV. The system of the Agricultural Distress Funds in Japan ..	255-388
with 19 tables on 9 sheets appended to page	388
Contents ...	i-xv
Index of Statistical Tables ...	xvii-xx
Japanese-English Glossary ...	xxi-xxvii
List of Authors ...	xxviii
Opinions of the Press, elicited by the German Edi- tion of this book ...	1-20
Other Works of the Author ...	22-26

AGRICULTURAL INSURANCE

IN ORGANIC CONNECTION WITH

SAVINGS-BANKS, LAND-CREDIT,

AND THE COMMUTATION

OF DEBTS:

Proposals for the Amelioration of the Condition of the Japanese Agriculturist.

(1886.)

Poor peasant, poor country !

Poor country, weak country !

INTRODUCTION.

LETTER TO HIS EXCELLENCY, COUNT YAMAGATA
ARITOMO, MINISTER OF THE INTERIOR.

YOUR EXCELLENCY,

I hasten to comply with a most kind request made to me by His Excellency Viscount NOMURA to write down for Your Lordship a lecture which I lately had the honour to deliver before him, and I do myself the honour to submit to Your Lordship's notice and judgment the accompanying work which contains proposals for the improvement of the condition of Japanese agriculture.

(§ 1.) The condition of the rural population has during the last years been eminently unsatisfactory. Proofs of this may be seen in the insurrections of peasantry, the feuds between debtors and creditors, the bankruptcy and compulsory sale of (in many cases) hundreds of farming establishments in several provinces, and the petitions sent to the Government by several great assemblies of agriculturists for the remission or diminution of the Land-tax.

(§ 2.) The fixed and high money Land-tax becomes op-

pressive for the agriculturist as soon as in any year the product of the two factors "saleable produce" and "price of sale" falls below the average assumed by the Land Tax Reform. Then the farmer incurs debt. But he can only obtain short credit at high rates of interest without repayment by instalments, and unsecured against a sudden notice of repayment, whereas, by its very nature, agriculture requires long Credit at low rates of interest with gradual repayment of Capital by instalments, and secured against any sudden re-call of the whole capital at once. So, for the want of such arrangements the Agriculturist falls into the hands of the usurer.

Also, even in years which are in the main propitious to agriculture, there are always many individual cases in which the farmer is struck down and ruined by special accidents, because he is unable to insure himself.

(§ 3.) His Excellency Viscount NOMURA gave it me as his conviction that an improvement of the agricultural interests of Japan was only possible by means of insurance, and requested me thoroughly to investigate the question as to whether the condition of the agriculturist could be improved by insurance. This I answered in the affirmative. But the enquiry also showed that there are certain losses against which it is not desirable to use the protection of insurance. But the farmer can insure himself against the irremediable consequences of uninsurable losses by saving money during good years. Hence, in addition to insurance we require facilities for saving.

The importance of saving, especially for the rural population, has already been officially recognized by the Department of Agriculture, Industry, and Commerce in a proclamation to the people issued last year. Unfortunately, the agricultural population of Japan are almost entirely in want of easy and convenient facilities for saving. The existing Post Office Savings' Bank, excellent and useful though it is, would, if more utilized than hitherto by the rural population, have the disadvantage of withdrawing money from rural districts to the centre of the country, and so interfering with the provincial circulation in a manner unfavourable to agriculture. Moreover the Post Office Savings' Bank is not yet convenient enough for the farmers.

(§ 4.) Inasmuch as Japanese agriculture is in want of suitable facilities for mortgage-debenture, insurance, and saving, it is unable to cope with the high and constantly uniform money land-tax. Ten thousands of country people have consequently been ruined during the past years, and helplessly delivered over to the blood-sucking usurer, and hundreds of thousands will so fall into his hands during the next decades.

What is needful is twofold :

I. We must help the country people who are already hovering on the brink of ruin : we must save them from the hands of the usurer.

II. Provision must be made to prevent other hundreds of thousands of good people from falling into distress through no fault of their own.

✓ (§ 5.) To meet the first requirement, I propose in the present work to make use of the law of 11th Sept. 1877 on the limitation of interest. At present this law is a dead letter, is constantly broken, and is of no assistance at all to the debtor. For this law only says that those debts which originate in the case of loans of sums under 100 *yen* from a rate of interest of more than 20%, or of loans from 100 to 1000 *yen* from interest at more than 15%, or over 1000 at more than 12%, are to be set aside by the court of justice. But the debtor will be afraid to invoke the law, for to do so will be to enrage his creditor, and after all, even if the judgment is given for the debtor, he will still remain in the hands of his creditor,—as far as concerns the capital borrowed, and the interest within the statutory limits of 20%, 15%, or 12%.

(§ 6.) In order to make this Interest Limitation Law practicable, we require a solution of the relations between Debtor and Creditor. This can be done without injustice or injury to either by assigning to the creditor interest-bearing mortgage debentures in lieu of his loan and interest. These mortgage-debentures are issued by an Institute, and the former debtors of the individual creditor now become the debtors of this Institute, and pay back to it the interest and capital of their loan. Thus at one stroke we get unwithdrawable long credits at low rates of interest, repayable by instalments, in the place of short withdrawable credits at high rates of interest, repayable in one sum,—an immense help for the debtor.

By putting the Interest-Limitation-Law into force and

getting rid of the debts overgrown through usury, I calculate in this work that the relief to agricultural debtors will amount to above 13 or 14 million *yen* per annum.

(§ 7.) It could still be increased if, in accordance with the present low rate of interest, the rates of interest allowed in the above mentioned Interest Limitation Law of 11th Sept. 1877, (up to 20, 15, and 12 per cent according to circumstances), were still farther lowered. But that such lowering may not be unjust to the creditor, it should be in no case retrospective. It would be enough if for the future the legal maximum rate of interest should be fixed at, say, 15, 12, 9 per cent, according to circumstances.*) When these debts are commuted, this new Interest Limitation Law would serve for the relief of the rural population. ✓

(§ 8.) In order to assist this commutation, special authorities will be required. I call them County-Arbitrators, General Provincial Commissions, and Higher General Provincial Commissions. In order to give sufficient security to the institution which issues Mortgage Debentures, it is not enough that the mortgages formerly held by creditors should pass into its hands; but the strength of these agricultural proprietors (the debtors) must be further protected against future accidents; and that, by Insurance (of crops, stock, buildings) and the provision of more convenient opportunities for saving (Parochial Post-Office Savings

*) In the period which has elapsed since the composition of this letter (April, 1886) and the printing of this book, the rates of interest have sunk still lower, so that an even lower maximum might be justifiably fixed. Ed.

Banks, Rural Savings Unions, both in connexion with the same Provincial Savings and Land-Credit Bank, which looks to the commutation of the claims of the above-mentioned creditors against agricultural debtors, by the issue of mortgage debentures). In a word, the commutation and the work of arbitration requires a Mortgage Debenture Institute, and a Mortgage Debenture Institute requires for its security the same provisions which Japanese agriculture in general requires, in order that its members may not, without fault of their own, come into misery.

The proposed means of redress, it will be seen, both from what I have said, and more clearly in the course of this work, are in organic connection; that is, we have to deal with a large number of changes, arrangements and laws, and each one of these, after it has been introduced, facilitates the introduction and carrying out of the rest.

(§ 9.) It appears to me too difficult to bring all these different arrangements into existence at once. We have to choose what to introduce first and what afterwards. In the third part of the accompanying work I have the honour to point out the temporal sequence of the individual steps which lead to the end. It seems to me to be the best practical sequence, but if it is followed the relief of the commutation will not be put into force for the next 4 or 6 years; and I do not conceal from myself the thought that should Your Lordship wish to undertake this matter, your first desire will be to afford as speedy relief as possible to the present needs of the suffering agriculturists.

If I am right in my conjecture that it is Your Lordship's desire to hasten this part of the work and to make it one of the first steps in the work, it could only be done by introducing anomalies, and the work could only be done hastily and incompletely. It might be compared to a temporary wooden building erected only because there is no immediate means of erecting a substantial edifice of stone. In practical politics it is often necessary, in view of present necessities, to be content with an imperfect temporary expedient. Nevertheless, it seemed to be my duty to lay before you the right and, as I think, the lasting plan, because it is easy from the plan to choose out what is most necessary for the practical needs of the moment, because then we can see the contingent anomalies with our open eyes, and can balance them, as defects which for the present are unavoidable, against the greater benefits which can immediately be attained. In such a case we know accurately what is fundamentally right and perfect, and when unavoidable defects occur we do not lose heart in our undertaking. Whilst the provisional wooden building is still standing we can lay the foundation and raise the walls of the stone edifice, so as to be able to remove at earliest possible moment into the more convenient and the more secure edifice.

(§ 10.) The proposed institutions and arrangements are new for Japan ; but they are not all absolutely new. This will considerably facilitate the security and the speediness of carrying them out. As examples of the "Provincial Savings and Mortgage-Debenture Institutes," we have the

German Savings Banks for Provinces, Counties and Communes; for the "Rural Savings Unions" we have the many Friendly Societies existing in Germany for various purposes. For the connection between the "Rural Savings Unions" and the "Provincial Savings and Mortgage Debenture Institutes," we have the well known "Stopped Accounts"; for Mutual Insurance the Public Mutual Hail Insurance, the Mutual Cattle Insurance and the Public Mutual Fire Insurance, in various German states. For the organization of the commutation of debts in order to relieve the agriculturist from the hand of the usurers, we have finally the various German authorities for the arbitration between landlord and peasant, with a view to the enfranchisement of the soil.

What is absolutely new is especially as follows:

1. The utilization of the commutation proceedings for the relief especially of the mortgaged agricultural debtors from their usurious creditors.
2. The mortgage debentures of the II and III Class.
3. The extension of the insurance of crops, so as to include other risks as well as that of hail.
4. The extension of house-insurance to cover other risks as well as fire.
5. The systematical organization of all the different parts of agricultural insurance after *one* plan for the whole country.

Etc., etc.

(§ 11.) I may perhaps mention that I have had the good fortune to have Viscount NOMURA's approval of my

plan. He gave it as his opinion that it is practicable and that it meets with his own views, especially because it brings into play the self-help of the concerned; that it is based on the administrative independence of the Provinces, and that it is easily adapted to the existing political organization. He further said that national and financial economy should be kept rigidly apart, and that in my plan they are kept apart. If it is the duty of the Finance Department to watch over the financial interests of the State, it is the duty of the Minister of the Interior to take care of the economical development of the people; and as in many other countries, e. g. Prussia, Insurance Loan-Companies and Savings Banks belong to the special province of the Home Minister, so he requested me to compile for your Lordship what had been propounded to him. He probably referred to the fact that in Prussia (see Rönne's Preussisches Staatsrecht, vol. iii., § 193) the following duties are assigned to the Home Minister:

1. The care of all public (provincial or municipal) Fire Insurance Institutes, and of all Private Fire and Life Insurance Companies.

2. Credit-Institutes, Loan Banks, Savings Banks, Provincial Subsidy Funds.

3. The general superintendence of the organization, and working of the Provincial authorities and the affairs of the County authorities.

4. The business connected with extraordinary occurrences which have an influence upon the prosperity of

the country, as inundations, epidemics, famines and the like.

5. The matters of municipal and rural communities.

6. The new settlements.

To the above No. 2 we must still remark that in the case of Land-Credit Institutions as distinct from the Savings Banks and Agricultural County Credit Institutes, the Minister of Agriculture has, since 1876, assisted the Home Department in the supervision. The Savings Banks, even when as a matter of fact they lend money on the security of land, are subject to the Home Department alone, the special mutual land-loan institutes generally known as County Credit Institutes (which by the way are not touched upon in this work) have since 1874 been under the Agricultural Department. Before that date they were under the Home Department.—In the *work of Commutation* the Services of the Judicial Department will have to be invoked. So that although to a certain degree the assistance of other Departments will be required in certain parts of the work, yet, as the greater part of the undertaking falls to the share of the Home Department, I venture to ask Your Lordship's kind attention to it.

(§ 12.) From the accompanying work I have omitted the following chapters, which were written some time ago and are still at Your Lordship's disposal.

1. Proposals for the improvement of the condition of agricultural tenants.

2. Proposals for the improvement of cultivation.

3. Proposals for the furtherance of colonization in the Hokkaido.

4. Proposals for the re-organization of Provincial Finances.

Viscount NOMURA insisted on the undertaking being joined with the organization of the *Renten-Bank* and the *Landes-Cultur-Renten-Bank* and thereby gave the *raison d'être* for composing the *first* two chapters. The reason for composing the two *last* chapters was that in a previous work for Your Lordship I had already treated of these subjects in connexion with the Land-Credit-Institute, and I wished to show its relationship to the present proposals.

These four series of propositions all contain later developments of what is proposed in the work. The proposals for improving the condition of the rural tenant presuppose the establishment of means and methods of commutation, the proposals for promoting cultivation and encouraging colonization in the Hokkaido presuppose the establishment of Provincial Savings Banks, Land Credit Institutes, and of Agricultural Insurance. And the proposals for the reorganization of the Provincial Finances presuppose the establishment of the Central Office mentioned in the work, which forms the medium of communication between the provincial establishments.

I had at first intended to add these four chapters to the present work. But I am afraid I shall already have trespassed too much on Your Lordship's patience, as I have not in the following pages expressed myself as briefly, clearly, and comprehensively as I could have wished. I

beg Your Lordship kindly to pardon the wearisome length of the accompanying essays, on account of the difficulty of the circumstances, their partial novelty, and the large number of various institutions for which I plead.

With deepest respect, I remain,

Your Lordship's

most obedient servant,

P. MAYET.

Tokyo, 2nd. April, 1888.



FIRST PART:

SYSTEMATIC INVESTIGATION.

INTRODUCTION.

§ 13.

In order adequately to answer the question whether the condition of the agriculturist can be improved or not, we must clearly take into consideration upon what that condition depends, and in what the essence of insurance consists.

If we leave out of consideration the question of the state of legislation and of the general circumstances of Japan, the condition of the agriculturist depends especially on

1. His property,
2. His crops,
3. The price of products,
4. The amount required for personal use,
5. His taxes,
6. His debts,
7. The circulation of money.

Naturally the condition of the agriculturist depends upon many other circumstances, on the general relations of

Japan, and upon legislative conditions ; e. g. cost of transport, competition against imported cereals, the extension of agricultural export, the condition of rural education, right of inheritance, right of mortgage, &c., &c., all these are more or less connected with the condition of the agriculturist.

But here I will only speak about those points which are in close connection with the present subject, and only so far as they are connected with it. The right of mortgage, it is true, deserves a careful consideration, closely connected as it is with what is proposed in the present work. It unmistakably requires improvement in many particulars. But as it would on the one hand require a large work specially devoted to the subject, and as on the other hand I am convinced that, with certain slight alterations, the Japanese mortgage-laws in their present condition will be found to suffice, I have not further touched upon the subject in this work.

Property and crops (above Nos. 1 and 2) are the subjects of *agricultural insurance*. Therefore I make the Section which treats of them Section A: "*Property and Crops and their Risks.*" Next follows Section B; *The nature of insurance and especially of agricultural insurance*, but without committing myself to the useless question of mere form, whether Insurance Companies, Mutual Insurance, or State Insurance be the most commendable. I speak simply of Mutual Insurance organized and directed by the public self-governing authorities of the Province, aided by the assured members.

Insurance of Cattle and Houses, for which we have many examples in Europe, are indeed important branches of the subject; but, as a matter of course, they are touched upon only briefly, both in this Section and in the whole work. The most important subject of this enquiry is consequently the insurance of "*crops*," which exists only fragmentarily in Europe in the shape of insurance against hail. To crop-insurance alone, and its relations to market prices, the amount required for home consumption, and to taxation (Nos 3, 4 and 5) is devoted the third part of Section B. This is entitled: "*Losses or portions of losses to be excluded from Insurance Indemnity*"; with three sub-sections:

1. Partial Indemnity as a precautionary measure against intentional losses.
2. Apparent losses, a peculiarity of too extensive crop-insurance, or the influence of prices upon the insurance question.
3. Restrictions under which the insurance against failure of crops can be made parts of crop-insurance; or the influence of prices, home-consumption and taxation upon the condition of the farmer in times of great distress.

Section C. very briefly treats of the relations of natural accidents and agricultural insurance with debts (No. 6) and circulation (No. 7); and finally Section D treats of those cases in which, as shown in the systematic enquiry, insurance must fail to protect against accident.

SECTION A: Property and Crops and Their Endangerment.

FIRST CHAPTER.

The Property of the Agriculturist and its endangerment.

§ 14.

As chief possessions we must reckon :

- a. Ground and Soil.
- b. Buildings.
- c. Live Stock.
- d. Harvest stores and seed corn.
- e. Agricultural Implements.
- f. (Standing Crops.)

N.B. We wish to contrast the "*Crops*" as a separate piece of property to the other "*Property*" of the agriculturist.

The accidents which befall the agriculturist in his property are (with the exception of those which befall his cattle) far less numerous than those which befall Crops; but they are generally, in consequence, proportionally heavier and more sensible. He may suffer even in the land which bears his Crops. Arable land which lies near

rivers is sometimes torn away and swallowed up by the stream, and volcanic eruptions bury wide areas of fruitful land under their lava and ashes. Inundations and tidal waves tear away dwellings and granaries; conflagrations and earthquakes destroy them; pestilences and diseases kill the cattle. And all accidents to which houses are exposed threaten the provision which he has made for seeding, home-consumption, or sale, as also the agricultural implements which he needs for the carrying on of his trade. Buildings, Cattle, Provisions and Implements are further exposed to the dangers of war and revolution.



SECOND CHAPTER.

The Farmers' Crops and their endangerments.

§ 15.

The quantity and quality of crops depend

- I. On men,
- II. On nature.

The *human influence upon the crops* must be further subdivided into the influence exerted by the individual farmer, (I *a*) and that exerted by others. (I *b*).

The *influence of Nature* must be further divided into long continuing chronic influences, (II *a*) and into transient acute influences (II *b*).

§ 16.

To I. a.—The farmer himself may be a cause of the deficiency of his crops: by insufficient manuring, wrong manures, careless tilling of the soil, as, e. g., not sufficiently breaking up the clods, making his furrows too shallow, or casting them up in a wrong way, treading down the ground too much in some places, not sufficiently in others, not harrowing enough, using too little, or bad

seed, faulty watering or irrigation, mistakes in the succession of crops, neglect of proper seasons, &c. &c.

The work required from the farmer differs with each plant; e. g. rice, hemp, potatoes, cotton, all require different handling. Now there are about 100 different plants which are cultivated in Japan: cereals, vegetables, fruits, industrial, and medicinal plants, &c. Hence there are also about 100 different kinds of cultivation. Even this does not suffice, for the treatment of each species differs according to the geographical latitude, the altitude, and the qualities of the soil.

The multiplicity of duties, upon the exact fulfilment of which the harvest more than half depends, is so great that it is absolutely impossible to examine or control the point whether the farmer has fulfilled them at the right moment, with proper industry and with a correct intelligence. To do this would require an overseer to stand in every hour in every field behind every farmer. It is only a man's individual conscience that can control it. Every weakening of the agriculturist's sense of responsibility, every diminution of the consciousness that upon his industry and faithfulness depends, if not entirely, yet to a very great extent, the result of the harvest, has a very bad effect. Any system of crop-insurance which should protect the farmer from loss or diminution, in spite of his own faults of management, would be a national calamity.

§ 17.

To I. b.—The success of crops may depend upon the

influence of others besides the farmer. Incorrect methods of insurance, mistaken legislation with regard to agriculture might be such influences. If the authorities neglect at the right moment to dredge the beds of the rivers which gradually silt up, or to raise and keep in repair dykes and dams, or to preserve the forests on mountains as means of protection, then alternate droughts and sudden inundations will destroy the agriculturist's labour.

Finally, war and rebellion, the common affair of the whole country, threaten from time to time, by destroying buildings or crops, to lay upon the shoulders of the peasants of certain districts, burdens which belong to the whole empire, and are too heavy for their shoulders.

§ 18.

To II.—*Influence of nature upon the crops.* The failure of crops may be caused by drought, wet, irregular seasons, cold years, long-continued cold weather. To this group of *chronic* natural calamities (II. a.) we may contrast a group of *acute* sudden natural influences, (II. b), tidal waves, inundations, typhoons, hail, water-spouts, earthquakes, eruptions, landslips, and the injuries of insects. The diseases of plants form a third group by themselves.

§ 19.

To II. a.—The first group of natural calamities has the peculiarity of frequently extending over immense areas. The history of Japanese famines shows that droughts, wet, irregular seasons, and long-continued frosts have attacked, at times, the whole land at once. Still more

frequent are the cases in which, though certain parts of the empire were spared, yet the calamity befell many, or the greater part, of the provinces.

To this extreme case of *entire failure* and consequent famine the cases of simply *deficient* crops are nearly related. These are of course far more common than serious failures. In such years, the farmer has many weapons with which to fight against the unfavourable disposition of the climate. Even if there is not sufficient water for the ordinary trenches, yet water may be found a little lower down. A more diligent use of the water-wheel, a more industrious drawing of water from the now shallower wells, can do much, as can also the covering up of plant roots with straw and mats as a protection against the parching heat of the sun. It is of course difficult to protect oneself against the effects of too wet a season only in the wet year itself; but as these effects are only felt injuriously on soil which is by nature prone to dampness, arrangements made beforehand for carrying off the water by means of drainage are a means of protection for such pieces of land. This has been often proved in European agriculture; and the same would be often very useful in the northern parts of Japan, Hokkaidō, Mutsu and Dewa. The less sharply the general unfavourable character of any year is pronounced, so much the more easily can the agriculturist, by his own timely exertions, fight against any possible evil results.

A further peculiarity of these so called bad years, to which I have lately called attention in my paper on

Japanese Famines, read before the *German Asiatic Society*, is found in the fact that they occur more frequently in continuous successions of years than singly. This peculiarity, however, they share with the years of failure and the years of good harvest.

A third characteristic of the so called bad years is that, whilst they have a bad influence with one or two kinds of crops, they tend to increase the harvest of other kinds of crops in the same districts. The agriculture of any country, in its choice of crops to be raised, is generally guided by the *average* climatic character of the country. The same thing does not hurt or benefit different kinds of plants. Bad years are only years which depart from the general average of meteorological phenomena. For instance, a deviation in the direction of greater heat may benefit some plants, and injure others. Thus cereals and bulbous plants are said to be in a certain opposition. The multiplication of plants to be cultivated is an excellent means of insurance against bad years. By this means the agriculturist gains more by one kind of plants than he loses by another.*)

*) This truth is no new one; it is practically recognized in Japan. It is owing to the gradual introduction of various plants improved or injured by the same climatic conditions that famines have occurred less frequently in later centuries than in former ones. It was in order to protect the population against famines of rice, by providing another means of support, that the cultivation of cereals was encouraged by Gensho Tennō and Saga Tennō after the empire had suffered from famines in the third and sixth year of Yoro (A. D. 719 and 722), and in the seventh and tenth years of Kōnin (A. D. 816 and 819). For the same reason Monbu Tennō encouraged the rearing of cattle after the great famine in the second year of Daiho (A. D. 702). Every farmer should be educated to understand this means of insurance, and be always encouraged to cultivate several crops at once.

To II. b.—It is the peculiarity of the second group of the above-mentioned natural calamities, which are acute and sudden, that the individual can not by his own exertions prevent them. So it is with tidal waves, typhoons, hail-storms, water-spouts and eruptions. Frost alone, though only in the case of some kinds of plants, as the vine, can be provided against by timely envelopment in straw. Against floods and damage done by insects, the *individual* is equally helpless, but the *community* almost always bears some guilt for the sufferings caused by inundations. Some of the damages done by insects, and, we may add, some of the diseases of plants are quite inevitable evils; but others can be limited by timely collection of caterpillars and larvae, and, by energetic comprehensive action taken by the central or provincial government.

SECTION B: The Nature of Insurance.

INTRODUCTION.

§ 21.

If we enquire into the nature of insurance, we shall see, for which of the above-mentioned accidents which befall the property or the crop of the agriculturist insurance may or may not be used. In those cases where insurance is not available, the farmer must be offered some other means of assistance.

Insurance is a mutual relationship between the insurer and the insured. The insurer undertakes to pay to the insured, or his legal successor, a sum of money in case an injury of a certain kind should take place. The amount of the sum of money is either fixed beforehand in the policy of insurance (as in life and cattle insurance) or it is only fixed in its maximum for cases of total loss, while, for partial losses, the sum is fixed by estimation (as in fire and hail insurance).

The insurer may be :

- A. An individual, as in swine-insurance against trichinosis ; insurance by an individual is scarcely ever found except in this case and in the case of so called self-insurance, or non-insurance.

B. A number of capitalists united for the purpose of insurance :

- a. Capitalists united *for one venture only*—old form of marine insurance.
- b. *Permanently* united capitalists,—*joint stock insurance companies*.

C. A fellowship, the single members of which are all insured by that same fellowship,—*mutual* insurance :

- a. Only an association of private individuals,—as for instance the Gotha Mutual Fire, Gotha Mutual Life Insurance etc.
- b. An association of private individuals assisted in its management by the state or municipality :
 - aa. *Voluntary* Insurance,—the Bavarian Public Hail Insurance (=Royal Bavarian Insurance Office, Hail Insurance Department), etc.
 - bb. Insurance *voluntary in some cases*, compulsory in others,—the Bavarian Fire Insurance (Royal Fire Insurance Office).
 - cc. *Compulsory* Insurance,—the Public Fire Insurance Offices in East Frisia, in the district of Wiesbaden, in the territories of Hohenzollern, in Baden, etc.

D. The State.

I here omit to speak of the cases *A. B. D.*, and whenever I speak of agricultural insurance I always mean associated mutual insurance. Later, I shall make a proposal about the co-operation of local governmental

authorities in the *management* of these insurance associations.—The essence of associated mutual insurance consists in dividing one injury among many people.

Such division among a number of members can be done in different ways :

1. Only in the present time,—technical means: The yearly allotment.
2. In the present and past,—technical means: annual allotment and reserve fund.
3. In the present, past, and future,—technical means: yearly allotments, reserve funds and loans.

We shall come to a proposition for Japan of a mutual agricultural insurance society on the basis of yearly allotments, reserve funds and eventual loans.

Our argument will take the following course :—

Chapter I : Distribution of the loss amongst many by annual allotments only.

Chapter II : Distribution of the loss amongst many and over a space of time.

Chapter III : Exclusion from insurance either total or partial.

Sub I : Partial indemnity as a protectionary measure against wilful injuries.

Sub II : Only Apparent losses ; a peculiarity of too widely extended crop insurance, or the influence of market prices upon the question of insurance.

Sub III : Restrictions under which insurance against “ failure ” of crops can be included under general

crop insurance, or the influence of market prices, home consumption, and taxation on the situation of the agriculturist in years of great failure.



FIRST CHAPTER.

Distribution of the loss among many by annual allotment only.

§ 22.

The distribution of the loss among many on principles which affect only the *present* associated members, is the simplest form of mutual insurance, and is used, for instance, in local cattle insurance societies.

The distribution of loss amongst many is always a great relief for the man who has sustained a loss; but the fewer the number of those who have escaped loss the heavier does it fall on them. Suppose that all are equally highly insured, and one of the members sustains a loss; then if there are ten members, each sustains one tenth, if there are a hundred, each sustains one hundredth, if there are a thousand, each sustains only one thousandth part of the injury. Of course, as the number of members increases, the probability increases that more than one member will sustain a loss.

If the number of members is very small many years may pass without any injury, but, when a loss comes, it is much heavier to bear. If the members are very numerous many losses come every year, and they must pay for those losses *every* year, but the contributions are more uniform

and consequently, more moderate. *The greater the number of the members, the more perfect is mutual insurance.*

Again *the greater the area included*, the more perfect is mutual insurance. If all the members live in the same neighbourhood the same natural calamity may affect them all. Even single provinces form too small an area for agricultural insurance.

Had there been a general mutual insurance society in Hiōgo Ken alone, a flood like the one at Osaka, which a few years ago brought loss to nearly 100,000 persons, would have brought it to the verge of ruin. Similarly, in a single province, the portion affected by typhoons, earthquakes, tidal waves or locusts etc. bears too great a proportion to the uninjured part of the province to allow of insurance appearing as a benefit. It is quite different when *one* insurance association is spread over the whole land. Thus, in fact, the European insurance companies, mutual and otherwise, seek to extend their sphere of operations as widely as possible. At the least they cover their own country, be it England, France, or Germany, with a network of agencies, and very often they extend themselves even into foreign countries. In the open ports of Japan, there are agencies for about 70 European and American insurance companies of all kinds. The first requirement for agricultural insurance in Japan is, that it should spread over the whole country. This can be most easily accomplished by establishing provincial insurance societies, confederated into a national insurance association for purposes of reinsurance.

§ 23.

If this be accomplished, agricultural insurance will be *possible and advantageous* against the greater part of *acute* natural calamities. There will then always be provinces uninjured which can help to bear the losses of the injured provinces.

There is no tidal-wave or inundation which could cover the whole land or even a considerable part of it. The coast line endangered by a tidal wave, and the river-side plains of the different streams, form but an insignificant part of the country. The volcanoes are never all in eruption at the same time and, at the worst, their lava and ashes only cover a few square miles. The area affected by typhoons, waterspouts or frosts is generally wider, *whole* provinces and even *several* provinces may suffer. But even the affected provinces do not suffer uniformly; a total loss of harvest occurs only along the course of the centre of the typhoon. Immense though the total sum of the loss may appear, it is always small as compared with the total harvest of the whole country. It is true that the earthquakes are sometimes felt over the whole land, but the destruction caused by them is always limited to a comparatively small area.

In most cases of diseases of plants and cattle, and of injuries done by insects, the losses may be easily divided every year among the existing members. But some cases occur where this is impossible. Of these later.

To the above mentioned acute elementary calamities

we have joined above those which arise from war or rebellion. Are these to be included in the insurance, it will be doubtful whether direct allotment of losses would always meet the wants of the case. Of these, too, I shall speak hereafter.

SECOND CHAPTER.

Distribution of the loss among many and over a space of time.

§ 24.

If we consider to how many injurious influences Japanese agriculture, as a whole, is subject, we cannot escape the possibility that in the *same* year different parts of Japan may meet with extensive natural calamities of different kinds. In the same year Kiushiu may lose most of its cattle through disease, central Japan may suffer from inundations, Kōzuke and Shinano be devastated by volcanic eruption, Musashi by earthquake, the coast of Rikuchiu by tidal-waves, Sanindō by locusts. It is not quite impossible for the sum total of the loss caused by such simultaneous calamities to amount to 40,000,000 yen. That would be a sum equal to the whole of the annual land tax. It is easy to see that it would be almost impossible for the insured fellows in the uninjured parts to undertake so heavy a burden in only *one* year without considerable harm to themselves, as each man would have to pay in that year a sum more than equal to the amount of his land tax. But such a supposition is quite unnecessary. So calamitous a year seldom occurs; why then confine its burden to *one* year? If, for instance, such a year occurs only once in 20 years on an average,

the losses of such a year may be divided among twenty years without doing harm to each single household.

The division over several years may be effected in two ways :

1. The years *before* great calamities may be made to bear their share by payment of a premium somewhat higher than is absolutely necessary, and by forming a reserve fund with the surplus. In exceptionally bad years this reserve fund will meet the extra claims.
2. But if this be insufficient the whole association may undertake a loan by which to repay the liabilities of the association. To do this, the loss must be distributed over the *following* years, in as much as the associated members must now contribute enough also to pay back the capital and interest of the loan. And to be sure, the amount of the annuity must be fixed so that the period of amortisation may correspond with the average occurrence of very bad years.

Both means, reserve fund and loans, belong to the means of insurance. In the internal organization of all kinds of insurance institutions, the reserve fund always plays a part, the loan only occasionally. In *Joint Stock Insurance Companies* the latter never can be used, because the risk-incurring members wish to see their risk confined within the limits of their capital. And wherever *Joint Stock Companies* can freely compete with *Mutual Associations*, the latter are restricted in their use of loans, which of course

imply higher payments for a time. But Loans are provided, for instance, in the case of the "Bavarian Fire Insurance Office for Buildings on the right side of the Rhine," which is an association protected from competition and under state direction. (See the law of 28th May 1852 Art. 68 and 69). That this means is so seldom used, and that the insurance companies generally decline such a greater sphere of action and responsibility, which would imply recourse to the expedient of a loan in order to make the future a contributor, finds its reason in the fact that the applicability of a loan depends upon two conditions. Of these we will speak in the next paragraph.

§ 25.

A mutual insurance association which makes use of loans, and is thereby obliged to ask for higher premiums, must be secured against two kinds of dangers :

1. Against its members retiring before the loan has been repaid, and
2. To a certain extent, against the competition of similar insurance societies.

If members might retire as soon as premiums are raised, the remaining members would have to bear more than their share, and there would soon be no members left, because all would retire and the payment of the interest and the repayment of the loan would not be assured.

If similar insurance companies may compete without restriction, new members would only join new societies which have not yet experienced a very bad year, and

the earlier society would gradually die out. If, in its turn, the new society experiences a very bad year, it also will lose its power of development, and new societies will always be being founded, implying a great waste of industrial labour and a dearer process of insurance, which, however, will be somewhat counter-balanced by the advantages of competition.

On account of these advantages, the establishment of new mutual insurance associations might not be entirely forbidden, but only placed under wholesome restrictions. —Examples of such restriction: Supposing there are provincial insurance societies in co-operation with the local government, and a general reinsurance association for the whole country, and supposing that, on account of a bad year and of loans, the members are obliged to ask high premiums for a series of years. Again suppose that, by the side of these provincial associations, an entirely private one were founded, the State might demand, before licensing it, that the new company should demand premiums on the same scale as its competitors, and that, for the moment, it should allow these contributions to flow into its reserve fund. In such a manner competition would be limited only to its wholesome side, and the provincial association would not even require a monopoly.

§ 26.

If we once adopt the method of distributing loss among many people and over a long period, then, without doubt we shall be able to include in our insurance the losses

caused by war and revolution, and by those acute elementary calamities which we thought doubtful when we had only the means of direct distribution.

Although war and rebellion may spread over a very big space, it is scarcely to be conceived that they would ever affect a tenth part of the 5,000,000 *chō* of cultivated land in Japan or of its 7,000,000 houses. It is true, Chinese history shows us by the example of the recent Taiping rebellion that such calamities are possible, at least in China, but the long course of Japanese history points to nothing similar. The greater national unity of Japan seems to protect it against such civil wars, and its insular position, from being overrun by countless hordes of foreign foes. Even the great destruction of houses in the Satsuma rebellion, would have proved no obstacle to including risk of war amongst insurable risks, as I have shown in my paper on the "*Collective insurance of Buildings in Japan*" (1878).

Many acute natural calamities, as, for instance, losses caused by insects, also demand that the insurance company should be provided with all three means of distribution. Unfortunately, as we know from the history of Japan, it is just rice which is subject to destruction by insects, and which has, though not often, been entirely destroyed in great districts. In the 18th year of Kioho (1733) rice-destroying insects made their appearance, especially in Saikaido, Sanyodo and Sanindo. The number of persons who perished from hunger in this year amounted to 160,000. For the same cause, there was another smaller famine in the west of the empire in the 6th year of Horeki

(1756).—In these cases the distribution of loss amongst many persons by direct allotment alone would not have sufficed, without reserve funds and loans.

The damages done by diseases of plants are very similar to those caused by insects; indeed, they are often confounded. The *phylloxera* is an insect, but is often spoken of as a disease of the vine. From the case of Ireland, in which the potato disease caused a great famine, we may see that plant diseases sometimes occur to a great extent.

§ 27.

The fundamental principle that mutual associated insurance becomes more perfect according to the greater number of associates, has a special application to the question whether few or many plants shall be included in insurance.

The disease of a plant may spread over the whole empire, but it will be confined to *one* cultivated species alone, the other 99 remain untouched. If only one or two of the cultivated plants were insured, the payments for recouping such losses might easily reach a great height. But if *all* cultivated plants have been insured, there is then the security that the diseased portion will form only a small part of the whole insured crops. Also in any case there will be then many members among whom the loss may be divided.

So also is it with losses caused by insects. The *phylloxera* only injures the vine, the Colorado beetle only injures the potato, many caterpillars are only dangerous to a single kind of vegetable, etc. Here also, in the insurance of all

kinds of fruits, there is a security that there are always enough insured possessors of uninjured crops to take upon themselves the task of repairing the losses without being particularly burdened.

§ 28.

At the close of § 19 I pointed out that the harvest is not generally good or bad for *all* plants equally; but that rather those climatic conditions which injure some crops are beneficial to others. From this point of view also it is advisable to include as many kinds of fruit as possible in the insurance.

Finally, from a practical point of view, it would be advisable to include even *all* cultivated plants. In consequence of rotation of crops, the same field does not always grow the same plants. If therefore only *some* plants were included and others not, the same field would be sometimes insured and sometimes not. This would involve many administrative transactions every year for the insurance company; but all this trouble would be saved if all possible crops were included in the insurance. In this case it would be sufficient to insure the field *once*, and the value (for instance, the land-tax assessment of the field) might be taken as the standard for the insurance premiums; whereas otherwise the value of the different crops would have to be taken as the standard.—The insurance of *all* kinds of crops is the more perfect organisation as it is the cheaper and simpler one.

THIRD CHAPTER.

Exclusion from insurance, either total or partial.

FIRST SUBDIVISION.

Partial Indemnities as a Precaution against Wilful Injuries.

§ 29.

It is clear without further explanation that one *can* use the three technical means of distribution also for those losses which are caused by *chronic* natural calamities (drought, wet, irregular seasons, cold years, want of sunshine, &c.). Compare § 19.

If we suppose one half of the empire to suffer from loss of crops, and that, with universal insurance, the loss of the insured amounted to 50,000,000 yen, it would of course be impossible to suppose that the insured persons in the other half of the empire could by an immediate single payment collect these 50,000,000 yen or even half that sum. The technical means of direct allotment would not here be sufficient. But if insurance against chronic natural calamities had been included, care would have been taken many years ago to accumulate a great reserve fund. By the time so great a calamity happens, this fund, we may suppose, will amount to 10,000,000, which leaves us 40,000,000 to meet. If this be done by loan (say at 6

per cent, repayable in 25 years) this would require an annual sum of 3,129,069 yen for interest and principal. To furnish this annuity during 25 years by an augmentation of the allotted contributions would be quite feasible.

We see therefore that in as far as it is only a question of procuring the money it would be quite *possible* to include insurance against *chronic* natural calamities. But what is possible is not always advisable or economically wise. It is "possible" to pay insurance money to the family of a suicide, or to the man who sets fire on his own house, or to the man who underfeeds, neglects, or overworks his cattle, or allows them to perish ; it is possible to pay money to the farmer whose crop is deficient on account of insufficient manuring, but voluntary injuries should always be *excluded*.

One chief principle of insurance is that a man *should not be insured against the consequences of his own culpable negligence or his own evil will*. That man who burns his house, is punished, and not relieved : the family of a suicide do not receive the money insured for. Cattle insurance companies lay down "that it is the duty of every member to take ordinary care for the feeding and treatment of insured cattle. Every neglect of this duty justifies the immediate forfeiture of the insurance, together with entrance fees and premiums already paid, and the forfeiture of all rights and claims upon the society and its properties." (However, the cattle insurance company must be organized in such a way that it can to a certain extent discover and distinguish any breaches of its regulations.)

If we apply this principle to crop insurance, then no payment should be made to the insured farmer for any deficiency of crops arising from negligence, etc.

This does not prevent all crop "insurance," for, in spite of suicide, etc., we still have insurances against death, fire, and loss of stock.

But when a farmer pleads a deficiency of crops from chronic natural calamities, how shall we decide whether he has honestly fulfilled all his obligations, or whether the deficiency is not rather due to his negligence? I have already pointed out that in the manifold operations of the farmer a proper control is quite impossible.

In years of *conspicuous* failure it is, of course, easily recognized that the deficiency is due to the *universal* drought or heat, etc. But in years of a less decidedly unfavourable character, it would be very difficult to determine how far the farmer fulfilled his obligations; because, in the absence of continued control, there would be no knowledge of his work. It is much to be feared that most farmers would neglect all extra precaution, if they dared hope to be able to recover damages from the company. Who, in Europe, would go to the expense of getting drain pipes, if he were safe, even in wet years, without such an expense?

If the insured company undertakes insurance against deficiency of crops arising from chronic natural calamities, the *greater* part of its business will not be with the extreme cases of injury to the *whole* country, *whole* provinces, or *total* failures, but generally with "bad harvests," i. e., such as are below the general average. But as we

have said, in these less decided years it is not so clear that nature should bear the whole guilt. Now, if in such doubtful cases—and, in most years they would form the majority of the cases—the society were to refuse all payments, it would often undoubtedly make an error: the refusal would often seem unjust to the farmer, and the society would quickly lose the confidence of the agricultural population, and would be considered not as a blessing and boon to agriculture, but on the contrary with dislike. If, however, the society adopted the opposite policy of always paying in these doubtful cases, it would, as we have already pointed out generally weaken the industry and foresight of the farmers. The farmer would think, why should he thus vex and trouble himself, when the insurance company is obliged to recompense him for all deficiencies? In thousands of cases this would lead to a careless cultivation, and the existence of such an insurance would be economically very injurious.

Now, there is yet a special means to replace the control of the insurance company and to incite the farmer to full activity and carefulness, in spite of his hope of protection. This technical means is *under-insurance* or *partial protection*.

Under-insurance is of a kind that the object insured is not insured to its full value. Its natural consequence is partial protection in the same proportion as that which the amount of the under-insurance bears to the full value.

Partial protection, however, can take place without under-insurance also, in cases of full insurance, if it be provided in the conditions of insurance that there shall be full payment in some cases, partial payment in others.

As we proceed with this inquiry, we shall see that, even though under-insurance provides means of sufficient self-control, there are yet other weightier grounds against the inclusion into insurance of *ordinary* deficiencies of crops.

§ 30.

Under-insurance or partial payment plays a great part in all kinds of insurance. The man who insures his life values it at more than the thousand or ten thousand yen for which he has insured it for the benefit of his family.—In countries where there is no state interference, the private fire insurance companies often leave this fact out of consideration, and consequently in times of commercial, industrial, or agricultural crises have to complain of great losses from incendiarism. “Thus from 1862 to 1866 during the commercial stand-still in North America, there was an epidemic of incendiarism. Before the war losses through fire amounted annually to \$22,000,000, but the in 1865 to \$60,000,000, and in the following year to \$100,000,000. During this period of five years there were 1837 fires in New York; of these, 678 were known to be incendiarism, a proportion of more than one to three.” (See Schmidt, *Das Ganze des Versicherungswesens*, 1871. page 80.). Almost all public mutual fire insurance companies observe this principle of under-insurance, because they always value a house at a low rate from the first. Already in 1878, in my paper on the “Collective insurance of buildings in Japan,” Section 10, I have proposed under-insurance for buildings.—In cattle insurance also the

mutual companies are more careful than the joint-stock companies about the amount of the insurance.*) In Baden the local mutual cattle insurance companies always require the insured to bear $\frac{1}{5}$ of the loss, in order thereby to ensure care and proper nourishment for the cattle.—By making the farmer in all cases bear a certain loss for himself, without hope of help from the funds of company, provision is made against his wilfully injuring both himself and the agriculture of his country by neglect and idleness ; and this provision would be effective even when the insurance against deficiency of crops arising from *chronic* climatic causes, would be allowed.

§ 31.

Under-insurance or *partial indemnities* can be arranged in different ways :

- a. The insured bears a fixed part of every loss, (e. g. a fifth, as in the Baden Local Mutual Cattle Insurance Associations) ;

or

- b. He may bear the whole of a moderate loss, the half of a larger one up to a fixed limit, but beyond that, he will be fully indemnified for the rest. (For instance, when the deficient crop is from 90% to 100% of the average, no payment is made ; if under 90,

*) Many joint stock companies for cattle or fire insurance have a clause in their conditions to the effect that in cases of "*over*" insurance, all claims against the company shall be void.

then from 80 to 90 half payments are made ; below that amount, full payment.)

or

- c. He may bear the whole of a moderate loss and receive full payment for anything beyond that. (For instance, the first 20% of the loss is not paid, every thing beyond that is paid for in full. Thus if a crop is 45% of the average, the loss is 55%; of this 20% are not paid for, but the payment of 35% is made.)

We need not here speak more about the best way of making partial payments for deficiency of crops.

Only we will remark that it seems advisable to graduate the partial payment *according to the danger* by which losses are caused.

EXAMPLES.

House Insurance :

- a. Against *earthquakes* there can be no protection,—full insurance.
- b. A *typhoon* is far more dangerous in cases of neglect from open doors and windows,—partial payment.
- c. Against *fire*, householders can do much by methods of building, measures of protection, and fighting against the element. It can also be caused by the houseowner.—Partial payments on terms less favourable to the houseowner, as in case b.
- d. *War* may be made an excuse for incendiarism,—partial payment as in case c.

Cattle Insurance :

For some kinds of cattle disease full, for others partial payment.

N.B. In Prussia, in some kinds of murrain full payments are made by the state, in other kinds (e. g. *glanders*, *phthisis*) only partial indemnities amounting to 75 or 80% of the loss are given, the loss being allotted to all cattle-holders after the provisions of the law concerning murrains.

Crop Insurance :

I. Against acute dangers.

II. Against chronic dangers.

I. *Against acute dangers :*

- a. Damages done by *insects* and *diseases of plants* ; where unavoidable, full insurance ; in other cases partial, varying according to the insects or diseases.
- b. *Earthquake, lava, landslips, waterspouts, hail, inundation by sea*—no resistance, no forethought, no anticipation possible,—full payment.
- c. *Frosts*—slight protection possible by covering and wrapping—partial insurance.
- d. *Floods*,—individual participation and guilt is possible when the members of a responsible community (Parish, Circle, Province) neglect the dams, embankments and regulation of rivers ; partial payment as in case c.

II. *Against chronic dangers.*

A. As cause of the losses : *ordinary bad years.*

N.B. As in a following section (§ 33 to 35) we give reasons for not including this case under insurance, we give no examples here.

B. As cause of the losses : *years of great failure.*

N.B. In such years if there is no crop, all difference between careless and careful farmers vanishes ; if a part of the crop is preserved this difference immediately appears. *It is therefore right to preserve the principle of partial payment for failures also.* This is the more necessary, because otherwise, if there were full payment for total losses, ill disposed people would find it profitable to take active measures for turning partial into total failures.

- a. *Long continued cold, cloudy weather, irregular seasons* :—cannot be foreseen nor combated—almost full insurance.
- b. *Wet* :—can, in the case of many properties, be anticipatively remedied by sub-soil drainage &c—partial protection.
- c. In cases of *drought* much can be done by irrigation, watering, covering up of the plant roots—partial protection, less favorable than in b.

§ 32.

If such varying degrees of partial payments be regularly introduced, the management of the Society does not thereby become more difficult, as the different causes can be easily and clearly distinguished in the announcement, the report and the control. After that it only requires a certain amount of arithmetical calculation on the part of the Insurance Office.

· SECOND SUB-DIVISION.

Only apparent Losses, a Peculiarity of too widely
extended Crop Insurance
or
the Influence
of Market Prices upon the Question
of Insurance.

§ 33.

In the commencement of our work we reckoned up various circumstances upon which the condition of the farmer depends, and which have some influence upon insurance. We then mentioned :

I. Market Prices.

II. The farmer's Home Consumption and Taxation.

Further on in the work we made a distinction between :

A. Ordinary bad harvests.

B. Years of great failure.

The influence of market prices (*I*) is most observable in regard to ordinary bad harvests (*A*), and the influence of home consumption and taxation (*II*) is most keenly felt in years of great failure (*B*).

In the present sub-division of our work we will now describe the conditions of the agriculturist in so-called bad years, and the influence of market prices (*I* and *A*). Then in the next sub-division we will consider the

limitations with which insurance against the deficiency of crops can be included, with reference to the influence of home consumption and taxation on the condition of the farmer in years of great failure (II and B).

§ 34.

For the farmer, the year in which he obtains less than an average crop is not always a bad year, he often suffers more in good years. Since Japan has altogether adopted the system of money payments, the farmer has to consider not only the quantity of his harvest, but there is also a second factor to be taken into consideration,—the price for which he can sell what he brings to market.

In consequence of lower prices he may easily receive less money in good years than in bad ones. An example would make our meaning clear. A proprietor who in ordinary years, after deducting what is required for seed corn and home consumption, brings 100 *koku* of rice to the market and gets 5 *yen* per *koku* may be able to sell in good years 110 or 120 *koku* or in bad years only 80 or 90. But as all his neighbours bring more rice to market in good years, the price sinks accordingly, and, *vice versa*, it rises in bad years. For instance, the formation of prices for different years might be as follows:—

Year 1. He sells 120 *koku* @ 3 *yen* and takes. 360 *yen*

„ 2. „ „	110 „ „	4 „ „	440 „
„ 3. „ „	100 „ „	5 „ „	500 „
„ 4. „ „	90 „ „	6 „ „	540 „
„ 5. „ „	80 „ „	7 „ „	560 „

We see that in this case the better the year the greater is the farmer's loss, and the worse the year the more he gains.

Would it not be foolish if, in consequence of a rise in prices, he obtains a *higher* sum, to make him an indemnification payment for a smaller *quantity* of crops. Evidently such a course would be folly. In consequence of changes of price the farmer may have more need of support in so-called "good" years than in bad ones. In "good" years the principal gainers are the towns and the industrial classes, in "bad" years they are the chief losers, as they buy the farmer's goods. But if in bad years *commerce* succeeds in importing sufficient quantities to bring prices down, the farmer may have to bear the whole loss.

The farmer requires indeed an insurance not looking only to the *quantity*, but to the *money value* of the crop. Yet, if we look at the facts in relation to agriculture, we shall find that such a form of insurance is not to be recommended.

§ 35.

What would be the requirements for an insurance of the money value of the crop?

The money value which the farmer can obtain from the portion of his crops which he sells depends, as I must observe, very greatly on his prudence, judgment and speculation. A farmer may have rightly judged that for the moment the market is overstocked with the commodity which he wishes to sell, that buyers are fewer than

sellers, and that it would be profitable for him to wait a few months. But what does this profit him if, in the absence of other resources, he is compelled by obligatory payments, say of rates or taxes, to bring his goods to market in spite of his judgment? Thus, the price which a farmer receives for *his* crops depends on his financial resources to a certain extent; i. e. whether he can wait for a favourable moment, or is obliged to sell against his will. Let us, for the sake of discussion, suppose that there really existed an insurance company to insure the money value of the crop. Evidently such a company could not take into consideration how much the individual proprietor receives for his sale or sales; for a foolish farmer will certainly sell the same quantity for less than the cunning one, and one who possesses a little capital will generally obtain more than the poor one who is pressed for money. Clearly, however, the farmer himself must bear the losses caused by his own stupidity. Hence we see that such a company could not consider *individual* prices, but only the yearly average market prices of the market town to which the farmer's property is declared to belong. Therefore among the requirements of such a kind of insurance we would have (1) trustworthy price statistics, and (2) a proper allotment of each farm to its proper market town.

But for many farms, *different* market towns are suitable in different parts of the year, according to the means of communication. Snow, floods, depth of water in rivers, muddy roads, have an influence on them. Also, the different agricultural *products* of the same farmer have some-

times different markets. The market for rice is not always the same as that for hemp, indigo, gampi, or oranges. In consequence of the rotation of crops, the number of fruits which the same farmer cultivates in the course of the year is very great; it would therefore be no easy matter to decide, at the time of its being admitted to an insurance company of this kind, to what market place any farm belonged.

Just as little as the price obtained by the individual farmer can be taken by the company as a standard in indemnification, so no more could the company base its reckoning on the amount of produce actually brought to market. For, on the one hand, the farmer may have something left from the preceeding year, on the other hand he may reserve for a later period a part of his harvest. The amount actually brought to market also gives a false picture of the actual condition of the farmer; if, for instance, when prices are high he limits his home consumption, by eating millet instead of rice, and thrashes more rice for the market.

If the Money Value Insurance Company were in existence, it would have to make complicated reckonings at the assessment of each loss; it would have to say, "in average years this property produces so much, so much is required for seed corn and home consumption; the remainder is so much, which is sold at such and such a price. Now this farmer claims to have had a bad season. As a fact the quantity produced has been so much; if we deduct the average quantity for seed corn and home con-

sumption, he has left for market purposes only so much. But in the market town to which his farm belongs the commodity in question has during the year borne an average price, according to which such and such a quantity should have produced so and so much. The difference between this income and the average income of ordinary years is the loss that we recognize."

We can see that in the above instance the company must consider the amount of the actual harvest. When can that amount be ascertained without possibility of deceit? It can only be done a short time before the harvest is gathered in. But at this time it is impossible to know what will be the prices obtainable; consequently, we can not yet tell whether it will be a good or bad year. If he has a deficient *quantity*, he may yet, with higher prices, score a profit, or *vice versa*. In the complete darkness which hides the future prices of his products, the farmer must, on the plea of existing possibility of loss, *always* ask for an appraisalment of the quantity of his crops, in order to enable the insurance company to get the most necessary data for its calculations.

But the farmer has not only one crop a year, but with his different products he has a whole series of crops. Consequently a money value insurance company would require a continuous *trustworthy* assessment of the crops of every insured farmer. It is clear that this could not be done without very great expense. Moreover, as the farmer must assist the agents of the company in every assessment of the kind, such insurance would take much time and

hinder him in his agricultural pursuits. These are some of the *practical* difficulties which stand in the way of a money value insurance company. A further disadvantage would be found in the fact that, in order to ascertain the yearly average market price, the farmer must postpone his claims for twelve months; before which time he could get no payment.

After this explanation I think every one will agree with me that a *money value* crop insurance is not an advisable form of insurance in general.

In the same way we have rejected a *quantitative* crop insurance for *ordinary* bad years. Because, as in the majority of such years the farmer is more than repaid by higher prices, it would be folly to add insurance to his other gains. We now have still left for us the inquiry whether it would not be advantageous for Agriculture to have some form of insurance against *extraordinary* failures of crops arising from chronic natural calamities such as drought, cold, rain, etc.

THIRD SUB-DIVISION.

Restriction with which Insurance against Failure
of Crops may be included in Crop Insurance
or
Influence of Market Prices, Home
Consumption, and Taxation on the
Condition of the Farmer in
Years of Great Failure.

§ 36.

In years of great failure we can distinguish *three grades*.

Highest grade : The Farmer has not enough harvest to be able to keep any portion for seed corn for next year or for home consumption ; he must buy it himself.

Middle grade : He has enough for seed corn and home consumption, but nothing over with which to pay his rates and taxes.

Lowest grade : His harvest covers seed corn, home consumption and taxes, but is less than in average years.

§ 37.

In the *lowest* grade it is always a question of how much the farmer can bring to market over and above what is required for seed corn, home consumption and taxes. There is also in this case always the *possibility* that *higher* prices may diminish his losses or even give him a gain.—This possibility does not exist in the middle

and highest grades. I shall, therefore, only inquire into the possibility and the right way of establishing crop insurance in middle and highest grades.

§ 38.

In the middle and highest grades the condition of the farmer is made worse by the high land tax. In order to protect the farmer to a certain degree against the pressure arising from land tax, I wrote privately on my own responsibility in the year 1878 a little work, not published at the time, but translated for the Ministry of Finance, "*On the diminution of the land-tax and the introduction of a monopoly on sake.*"*) In this treatise I prophesied the bad condition of the agriculturist in consequence of the heavy money tax on land, pointed out that debt was always more and more threatening Japanese agriculture, and recommended land-tax-reserve-funds for every county and province and one central fund for the whole empire. I had the honor to be commissioned by the Minister of Finance to work out and submit to him a project of law on this subject. This was the foundation of the *Agricultural Distress Funds* which now exist by law, one in each province and one for the whole state.†)

Since the state contributes one million two hundred thousand yen, and the agricultural population of the provinces 900,000 yen, making a total of 2,100,000 yen, and since the government contribution is promised for 20

*) Cf. Append. III.

†) Cf. Append. IV.

years, both sources of income amounting in this period to 42,000,000 yen, it will be seen that Japan already possesses a certain protection against the pressure of the land tax in years of bad harvest. Should this fund be exhausted in a year of calamity, we may certainly suppose that the government would again put into force the ancient Japanese custom of remitting the land tax, as has been done sometimes for the whole empire, sometimes for certain provinces ; for instance, under

Genshō Tennō,.....in the 6th year of Yōrō (720 A.D.).
 Junjin Tennō, ... , , 7th , , Hōji (763 A.D.).
 Shōtoku Tennō, ... , , 2nd , , Jingo (766 A.D.).
 Kuwanmu Tennō,.. , , 9th , , Yenriyaku (790 A.D.).
 „ „ „ „ 18th „ „ „ (799 A.D.).
 Hiyo Tennō, ... , , 1st „ , , Daidō (806 A. D.).
 „ „ „ „ 3rd „ „ „ (808 A. D.).
 Ninmiō Tennō,..... 2nd—7th „ , , Yōwa (835—840 A.D.).
 Montoku Tennō,....in the 1st. „ , , Ninju (851 A.D.).

By a remission of the land tax the non-agricultural taxpayers are of course made to contribute more than usual. This, however, can be no objection in Japan where out of a state income of 70,000,000, the land tax alone produces about 43,000,000, and where the land tax is recognized to be far too high in comparison with the other taxes, and where from the year 1873 the government has been under a promise to lower it to one per cent of the estimated value of agricultural land.

Generally speaking, the extreme pressure upon the farmer

should be relieved by an universal financial reform of taxation, including reduction of land tax, and, in the above supposed case, where the Agricultural Distress Fund fails, especially, by a partial or complete remission of the land tax. The introduction of any other particular form of insurance against the distress resulting from the land tax would therefore be irrational.

§ 39.

But even if the land tax were reformed there would still be, in years of great failure of the “highest grade,” the pressure put upon the farmer to buy seed corn and necessary food for home consumption.

In years of so serious chronic calamities assistance and protection should be found in an “Insurance against Failure of Crops,” as it will be found against acute calamities in crops, cattle, and buildings insurance. This insurance against failure of crops may be limited as follows, that a duty of indemnification exists only:—

- I. When the failure is clearly due to natural causes and the farmer is not to blame, as when a whole province or county suffers loss.
- II. When the failure of the individual farmer of that province or county is a total or a considerable one, as, for instance, when the rice crop is less than 70% of an average crop, or that of other produce less than 60% or 50% or 40%, etc.

- III. When that indemnification is only partial and the farmer bears the other part of the burden.
- IV. When that indemnification is made, not according to market prices obtained during the year of failure, but according to an average price agreed upon when the insurance was first effected.

If we think of insurance against failure of crops with these limitations, it seems to me that it is possible and practicable, of no great cost, of great value to the farmer, and harmless to agriculture. I, therefore, approve of including an insurance against failure of crops, thus or similarly limited, into our scheme of crop insurance.



**SECTION C: The Relations of Natural Calamities
and Agricultural Insurance to the Debts of the
Farmer and the Circulation of Money.**

CHAPTER I.

Of the debts of the farmer.

§ 40.

The farmers debts have a six-fold relationship to the accidents which befall him and to insurance.

As long as there is no insurance,

- I. All debts require higher interest, because the risk of the loan is increased by the possibility of ruin.
- II. Debts are withdrawable only at short notice, because the creditor can not overlook the condition of the debtor for many years.
- III. Loans are generally not granted to the farmer by public banks, but almost entirely by private men, friends, relations or neighbours, or else by capitalists, or by loan societies in neighbouring towns. Hence repayment is generally demanded in a single sum or in a few large instalments.

The farmers debts have a closer relationship to years of need, and to accidents, because :—

- IV. They often have their origin in such years

after the occurrence of calamities, and are then generally contracted at exorbitant rates of interest.

V. Because part of the debts which the farmer incurs for the improvement of the land are incurred as a means of protection or against bad years, e.g., for irrigation or drainage.

VI. In bad years all debts are heavier for the farmer as regards both amortisation and interest. Consequently he must frequently incur fresh obligations and the risk of falling more and more into the hands of the usurer.

§ 41.

Already in the year 1878 in my above mentioned work on the diminution of the land tax, I pointed out the danger that the land might pass from the hands of the farmer into those of the money lender. Unfortunately my prophecy has found only too quick a fulfilment. The evil is still in its beginning and already is making such wonderful strides that *heroic remedies must be applied*. I will give a few facts to prove this point, regarding it as a very important one.

In the papers on the causes and remedies of trade depression, contributed by Messrs KATO, MORITA, and HISAMATSU to the Hōchi-shimbun, we find the following statistics for *Okayama-ken* from which we gather that bankruptcies, compulsory sales and mortgages have increased from year to year.

Okayama-Province.

Year.	Mortgages on houses and land.		Compulsory sales.		Bankruptcies.	
	Yen.	Persons.	Yen	Persons	Yen	Persons.
1879	2,881,300	63,577	105	9	5,699	52
1880	4,123,940	78,023	259	24	2,916	54
1881	5,322,164	86,470	1798	40	5,132	84
1882	6,097,271	107,574	7481	106	22,342	199
1883	7,072,120	137,008	21,414	520	58,811	493

A notice in a newspaper, April, 1883, values the mortgaged land in *Shizuoka-ken* alone at 15,000,000 yen. (?)

An official report on mortgages for *all Japan* in the 14th year of Meiji (1881) reckons them at 141,000,000 yen as compared with an assessed value of only 123,000,000 yen, and that with a number of about 2,000,000 mortgages. The mortgages taken up, therefore averaged only about 72 yen, a fact which shows the immense need which Japan has for mortgage credit in small sums, such as cannot be satisfied by any great central office. (See table on the next page.)

It will not be useless to repeat here a few facts relating to agricultural distress during the last two and a half years. By the side of the great sums in our table of statistics, there is nothing so well fitted to ripen the resolution for undertaking grand measures, for *creating a complete system of institutions* and for overcoming all these numberless difficulties.

Fukagawa, November, 1883. 147 farmers arrested for not paying their taxes. (Jiji-shimpō.)

Mortgages of Land in the 14th year of Meiji (1881).

Fu and Ken.	Number of Cho.		Value according to Land tax Assessment.		Amount advanced.		No. of Mortgages.
	Cho.	Tsubo.	Yen.	Sen.	Yen.	Sen.	
Tokyo	2,060	1802	1,586,211	485	2,320,431	851	12,925
Kiyoto	3,394	1311	1,242,865	124	1,483,562	932	18,480
Osaka	7,537	2916	4,420,586	435	4,582,745	560	39,897
Kanagawa	12,845	2918	2,671,256	500	4,660,919	680	55,443
Hiogo	12,307	9420	5,881,174	269	4,887,717	355	62,278
Nagasaki	13,957	0918	4,651,004	851	4,288,639	799	74,415
Niigata	10,522	2100	2,153,454	693	4,656,098	345	35,274
Saitama	15,155	9925	3,701,248	001	5,218,379	706	72,844
Gumba	18,437	8203	4,327,052	497	5,162,111	684	80,457
Chiba	10,278	8716	2,737,181	762	4,536,976	090	63,730
Ibaraki	14,617	7709	3,288,333	405	3,898,977	592	76,575
Tochigi	18,229	5015	3,232,797	073	3,714,971	479	61,171
Miye	10,981	48.	5,653,933	588	3,635,634	279	52,299
Aichi	8,913	1603	3,327,375	054	4,402,959	232	57,928
Shizuoka	8,556	1620	1,726,203	732	2,209,163	714	29,599
Yamanashi	6,683	6426	2,121,790	776	3,093,934	336	35,379
Shiga	5,082	5820	2,288,093	642	2,205,275	462	30,383
Gifu	12,515	1209	3,059,667	928	3,460,000	525	46,018
Nagano	13,800	4814	2,856,060	688	5,572,961	644	54,012
Fukushima	14,135	3202	3,744,875	707	3,854,154	809	61,552
Miyagi	12,777	2228	1,867,393	458	1,666,226	078	31,417
Iwate	13,066	8323	838,256	025	1,302,679	272	18,338
Aomori	5,015	9116	824,372	647	780,082	024	10,003
Akita	9,137	0709	1,527,987	001	2,222,470	706	24,526
Yamagata	6,828	8912	1,772,275	439	2,779,213	667	25,454
Ishikawa	13,752	7316	4,972,979	862	3,750,781	536	38,658
Tottori	3,875	4417	1,579,469	134	1,236,548	284	21,827
Fukui	2,952	3425	862,862	240	1,221,060	788	12,413
Shimane	17,470	3907	4,114,690	114	4,858,542	207	67,518
Okayama	14,240	2820	6,173,085	833	4,979,799	802	88,269
Shiroshima	10,005	6421	2,772,744	818	3,272,390	787	65,637
Yamaguchi	8,478	1323	1,894,183	542	4,369,279	182	61,493
Wakayama	5,831	8606	3,008,579	267	2,616,567	129	32,328
Tokushima	8,731	3627	3,248,167	526	4,343,097	158	69,529
Kochi	6,151	6928	1,273,532	536	2,256,821	690	29,462
Ehime	14,198	7218	4,685,039	355	5,339,656	728	59,047
Fukuoka	16,056	4109	6,103,495	855	5,081,454	932	82,450
Oita	13,341	0727	3,854,125	509	4,603,711	090	80,277
Kumamoto	11,305	3516	3,543,496	469	4,152,831	175	69,099
Kagoshima	11,631	2828	3,161,640	793	1,847,503	800	54,181
Total:	423,900	8011	122,751,044	633	140,616,334	113	1,962,685

N. B. Oshima and two insular districts of Kagoshima are not mentioned in the above table, as owing to their remoteness the necessary statistics did not arrive in time to be included.

Shinshiu, December, 1883. More than one half of the farmers at Taguchi-mura, Minami Sakuma-gōri, sold land and houses to free themselves from debts. The property only fetched one third of its value. (Mainichi-shimbun.)

Yamanashi-ken, May, 1884. In every village there are many farmers unable to pay their land tax. In Osumi-mura, with 400 houses, all the inhabitants with two or three exceptions have been declared bankrupt. The debts of the village amounted to 170,000 yen, the mortgages to 50,000. (Jiji-shimpō.)

Kanagawa-ken, May, 1884. The money lender Usaburo and his adopted son, from Ishikimura Yurugi-gōri Sagami, were murdered in Oiso by 11 desperate farmers who immediatly delivered themselves up to the police. The conspirators were said to amount to two or three hundred persons. (Mainichi Shimbun).

Idzu, September, 1884. The long contest between the debtors party (Shakkin-tō) numbering several thousands of members, and the Loan Companies came to a satisfactory conclusion. It was agreed that the rate of interest on all future loans should be 13 per cent per annum. All present existing debts were divided into two classes: (i) debts repayable in 5 years at 8 per cent per annum, and (ii) debts repayable in 3 years at 10 per cent per annum. (Jiyu Shimbun.)

Saitama-ken, Nov., 1884. Insurrection, short lived only, in Chichibu-gōri, which spread to Gumma and Nagano, but in consequence of which a society of debtors and tenant-farmers was formed, which demanded a reduction

of the rate of interest and a reduction of rents. In February, 1885, 2644 were punished for taking part in the insurrection. Amount of fine 4465 yen.

Harima, Nov., 1884. More than 900 farmers in Kayoshigōri were declared bankrupt, and put up their property to public auction in order to pay the first instalment of the land tax due in August.

Kawachi, Nov., 1884. In Shibukawa and Ibarata-gōri, disturbances were feared in consequence of the distress. (Jiji Shimpō.)

Idzu, Nov., 1884. The farmers in Takatagōri refused to pay their rents except at a reduction of three tenths. (Mainichi Shimbun.)

Idzu, January, 1885. The debtors' party unquiet again; 150 members under criminal investigation.

Idzu, February, 1885. Conflict between 44 villages and the Okuriya Bank and a Loan Company. An assemblage of about 2000 poor people made a demonstration against these banks and demanded a change in the loan conditions. This meeting was dispersed by the police at Nishima on the Tokaido.

Kaga, February, 1885. 800 necessitous inhabitants of Daiseiji ask the authorities to be imprisoned in preference to starving from hunger and cold. (Choya Shimbun.)

Miye-ken, April, 1885. Undeniable agricultural distress. In Watarai-gōri not one third of the taxes paid, 14 days after falling due.

Hyōgo-ken, May, 1885. 3000 inhabitants of Amata-gōri, in want of money held a mass-meeting at Fukuchi-

yama and resolve on a petition to the Government. (Jiji Shimpo.)

The most instructive part of these notices is that the debtors' party in Idzu considered the exorbitant rate of interest of 13 per cent as a benefit; and that another boon was supposed to be the postponement of repayment to 3 or 5 years. This clearly points to the need agriculture has of a system of credit spread over a long term and at a low rate of interest.

CHAPTER II.

The Farmer and the Circulation of Money.

§ 42.

The money circulating in the state may be not inaptly compared to the blood circulating in the human body. A uniform circulation is required for the uniform nourishment, increase and activity of all parts, but if the blood flows excessively to the head, or the money to the capital, inflammation, feverish speculation, giddiness sets in in the one part, while other morbid symptoms appear in the remaining almost bloodless parts. The organization of money-circulation in Japan has this defect, that every year more and more of the money in the country flows to the capital, as may be seen, e. g., by the continually increasing amount of Government bonds possessed by the principal towns. In consequence of the want of ready money in the provinces, market-prices have a tendency to fall, money loans are difficult to obtain, and hard cash for the payment of taxes is with increased difficulty procured.

Even the funds for the protection against failure, half of which were contributed by the farmers, must according to Article V, Paragraph 2, of the law on the Agricultural Distress Funds, be invested at least half in government bonds on account of the want of other safe investments.

Also the private savings invested in the Post-office Savings Bank are all sent from the provinces to the capital and into the Treasury. Thus even the most useful and wholesome remedies in a certain sense only increase the bad condition of agriculture.

Since agricultural insurance must also collect considerable funds which if once drawn from the provinces to the capital will only return to them in exceptionally bad years, the new arrangements must be made in such a way that proper investments can be found *in the same provinces* from which the funds are drawn. It would be thoroughly wrong and injurious to choose government bonds as the sole investment for these funds. The high quotations which these bonds would reach, does not imply a low rate of interest for the whole country. We saw above that a threatening combination of debtors only succeeded in reducing the rate of interest to 13% for agricultural debts. A low rate interest limited only to government bonds can only produce a small part of the beneficial influences which a universally low rate of interest would have for Japanese agriculture.

As we saw just now, insurance is not enough ; it must be able to lean upon solid provincial bank institutions which retain the money in the provinces.

SECTION D: Filling up the Gaps left in the Protection by Insurance.

§ 43.

The enquiries into the circumstances which influence the question of insurance taught us that insurance was good only for a part of the *many* losses to which the farmer is liable, namely, for acute accidents and great failures; but that there *remains* a great portion which can *not* be covered by insurance. It taught us that quantitative crop insurance and money value crop insurance were alike useless, and we gathered that there are wide breaches in the wall which insurance places around agriculture through which misfortune can enter.

Now if we ask if the farmer has no means of protection against bad years except insurance, we must answer that nature itself points to the means. For groups of bad years alternate with groups of indifferent and good years. In Sweden in the hundred and one years from 1750 to 1850 there were 29 bad years as opposed to 48 indifferent and 24 good years; for every three bad years the farmer had seven years during which he could save. And this proportion would change little for Sweden if we supposed that in bad years the Swedish farmer had obtained high prices: for then for every two and half years of bad prices he would have $7\frac{1}{2}$ years of moderate and good prices. In Japan it is the same: here also the good and moderate

years are at least two or three times as numerous as those in which he is obliged to fall back upon his savings.

The farmer must *save* in good years in order to have something to fall back upon in bad ones. This also is a kind of insurance, for in many kinds of insurance thrifty accumulations of the insured are quite as important as devaluation of loss and its distribution among others. For instance in life insurance both principles work together; the sum payable at death is an accumulation of premiums, which represent the long continued savings of the deceased. If the insured lives only a short time and it has been impossible to save the full amount of his insurance the means of paying the sum he insured for is found in the fact that others lived beyond the average number of years. The loss on the early death is transferred to the happier long lives. To be insured is a form of saving, and saving is self-insurance, a kind of insurance. Saving and insurance supplement each other.

If the farmer has savings in cash or in bonds and has not spent all in buying land or erecting a better house or buying finer clothes, he has no need to squander his crops in order to procure a little ready money; each and every year he is better off, if he has the protection of his own capital. It will protect him in years of great pressure from ruin and destruction, and liberate him from the burden of exorbitant interest.

Instruction ought to show him the great utility of *regulated* saving. But instruction *alone* is not enough. He must have easily accessible, simple and secure saving-insti-

tutions which shall accustom him to *regular* (weekly or monthly) saving by offering him opportunities arranged for the purpose ; and those new opportunities must not have again the fault of taking the money out of the province. The accumulated funds of saving just as those of insurance, being drawn from the agriculturist, both must benefit agriculture. Agriculture requires them in the form of mortgage loans at low rates of interest, repayable over a long period, by instalments. Hence arises the plan which follows in Part II.

§ 44.

But before I pass over to it I should wish first to meet an objection, namely, that no Crop-insurance and no Savings Banks are required, as there is already the Agricultural Distress Fund. Of course the task of the present Agricultural Relief Funds is to keep the agriculturist afloat. For Article 1 of Notification 31 of the Daijo Daijin, dated 14th June, in the 13th year of Meiji, is as follows :—" By Agricultural Distress Funds are meant such moneys as are payable for food, houses, agricultural implements and seed to such poor people as are in want through a total failure of crops or through a visitation of Heaven. Also such persons, as, for the above reasons, cannot pay the Imperial land-tax, may be assisted by donations of money, or by loans."

Agricultural Relief Funds then, are a protection against *need*, but not against *losses*. The moneys entrusted to such funds benefit in the first place the smallest farmers ; those

who have more property cannot claim anything till by their losses they have been reduced to want. Insurance and Savings banks would attempt to prevent their being reduced to absolute want. From the above-cited examples of the wide spread agricultural distress in Japan, we can see that a relief fund by itself is not sufficient.



SECOND PART.

PRACTICAL REMEDIES PROPOSED.

SECTION A: The Organic connection of Savings Banks, Land-Credit Institutes and Insurance.

§ 45.

The farmer requires (1) the Savings Bank, (2) the Insurance, (3) the Land-Credit.

A *Land-Credit Institute* requires on the one hand capital, which can to a certain extent be supplied by the *savings* of the farmers. On the other hand it requires for its loans all that security which can be afforded by a system of *agricultural insurance*.

If *agricultural savings* are to remain in the provinces and be beneficial to the farmers, *provincial banking establishments* are required, which invest the same partly in long credits and partly in short ones. Long credits however, in their turn require the security of *agricultural insurance*.

Agricultural insurance, if based not only on the principle of a yearly distribution of losses amongst many persons, but on the further principle of a distribution of losses over many years, requires a considerable accumulation of funds

to be partly invested in mortgages. It can make use of *provincial banking establishments* as a means of communication between itself and the insured. Further it shares with the Land-Credit Institute in the need of trustworthy appraisers with special knowledge.

Agricultural Savings Banks, Land-Credit and Agricultural Insurance are organically connected and mutually support and benefit one another. This is a great recommendation for a methodical organization of the three systems together.

§ 46.

But it is quite clear that Savings and Credit Establishments must run not even the slightest risk arising from Agricultural Insurance. Moreover, we have already pointed out that the wider the area embraced by insurance, the better becomes the organization of insurance; and that consequently it is requisite to have *one* system of insurance for the whole Empire.

On the other hand, if agriculture requires provincial Savings Banks and provincial Land Credit Establishments which must in no case bear the risk of Insurance, but which can be more economically managed by making use of the same staff of officials, we then meet with the further demand of *one Insurance-establishment for the whole Empire, and of one provincial Savings and Land Credit Establishment for every province*:—and such a connection between the two that the “Provincial Savings and Land Credit Institute” acts in each province as the *agent* for the Insurance Office.

§ 47.

A further benefit will accrue to insurance from its connection with the Land Credit Institute. It will be a fundamental rule of all the Provincial Savings and Land Credit Institute *that no farmer can obtain a loan who has not become an insured fellow*. Insurance is something new in Japan, and presupposes great intelligence in those who seek it. If agricultural insurance were to be established without those other institutions, we should have to face the question whether in every province or county there would be enough persons possessed of sufficient *intelligence* to enter it *voluntarily*. If they did not do so the provincial office would be saddled with tremendous working expenses out of all proportion to the amount of business done. On the other hand if the state by legislative action established the Insurance Office, it would be inclined to make the insurance compulsory. Now I am not personally averse to compulsory insurance; nay, I consider it a great boon, as is seen in such countries as possess compulsory house-insurance (e. g. Baden, Switzerland); the idea of compulsory insurance is also every year getting more advocates, and so within the last few years the German Empire has established compulsory insurance against accidents. But *as a first step* I would not, for practical reasons, advocate compulsory insurance. In such a case the number of persons to be insured at one time would be so great as to entail new and considerable difficulties for the task

of first organisation. If the provincial establishments refuse all loans to such farmers as are not already insured, the number of fresh insurances would, in view of the present need of credit, certainly amount to several thousands even in the first year. Moreover these thousands of persons would be scattered about in the twenty or forty Provinces which had established the Provincial Savings and Land Credit Institute. This distribution of members over a large area is extraordinarily favourable for insurance, in as much as then each natural calamity will probably only affect a fraction of the insured.

§ 48.

But what prospect is there that the above mentioned loan institution will be so quickly established in a great number of provinces? In reply to this I could quote the universally pressing need. But this would not be enough, for the need has already existed years without being satisfied. The task will be to delineate and devise a simple and general plan for the founding, organisation, and management of such institutions, with an accurate description of all the business transactions together with one of the books and forms necessary, and an explanation of the plan and method of business together with the instructions to the officials. If the establishment of these forty institutes were thus prepared and assisted, we should have a better prospect of seeing them soon come to life.

In order to give to the small investor the same security

as is offered by the post office savings bank, and in order to keep the loan-giver free from all tendency to exhaust the farmer by usurious rates of interest, and at the same time to meet all just requirements of agriculture, it is necessary that these institutions should be *provincial institutions, self-governing institutions*, managed, supervised and guaranteed by the provinces.

This extension of their self-government and the manifest utility of those institutes for the inhabitants of the province will be a great inducement to the provincial assemblies for founding them.

The government can however give additional inducements to the provincial assemblies, in two ways :

- I. By founding "*Parochial Postal Savings Banks*," and providing that the moneys invested in them shall be entrusted to the provincial institution where such exists.
- II. By providing that only those provinces which have established such an institution shall be entitled to obtain a loan from the "*Fu-Ken-Bank*"*) for their own provincial purposes, as e. g., construction of roads, dykes and public buildings, regulation of rivers, improvements of harbours, etc.

*) Compare Appendix I. Chapter IV., "Provincial Savings and Land Credit Institutes and the Communal Obligations," where I make proposals for the reorganisation of the provincial finances.

SECTION B: Agricultural Insurance.

§ 49.

Agricultural insurance is, as we saw in Part I, concerned with numerous groups of insurable objects, and with a great number of dangers some of which threaten objects belonging to several groups.

For instance, inundation is a danger which threatens objects of each group, it can destroy the crops in the field or in the barn, drown the cattle, wash away the house, cover with stones the soil which produces the harvest, and streams may even wash away the soil itself.

The four principle groups of insurable objects are :

I. *The Fruit bearing Land*, with its appurtenances for drainage and irrigation, walls and steps, the fruit trees, wines, etc.

N. B. Agricultural implements may be added here, as these are in proportion to the extent and special kind of cultivated soil.

II. *The Fruits and plants of all kinds*, ripe and unripe, in the fields, on the trees and vines, etc., as well as the harvested crops in stacks, on the fields and in the sheds.

III. *The Cattle*.

IV. *The Buildings*.

In these four groups one must determine what to include in insurance and what not. Take the case of the

insurance of animals. In Germany we do not insure fowls, ducks or rabbits. Many companies also leave out pigs, sheep, goats, mules, donkey, etc. and limit themselves to cattle and horses. In Japan the two last are as yet the only agricultural animals of importance. For the present therefore we may limit ourselves to them. Further even in horses and cattle, it is customary to leave out of insurance those which run the greatest risk on account of their ages or their occupation.*)

In a similar way one should *not* include in agricultural insurance every thing that is connected with the buildings. For instance if the farmer possesses an especially valuable ceiling of rare wood or of wood of unusual size, it would only be reasonable to exclude such unusual things from agricultural insurance, if by excluding them one can obtain cheaper management cost on account of simpler assessments.

In the above reckoning we have omitted a fifth and sixth group. To the 5th group I would reckon all those things which result from a manipulation of the original agricultural products, for instance, cotton or silk-thread or stuff and *sake*. On the other hand cocoons, raw cotton, etc., may be reckoned among the raw products of harvest, if suitable rules are laid down especially for them.

*) For instance, in the Brunswick General Cattle Insurance Association the following are altogether excluded from insurance: foals under one year, and horses over twelve years; cattle under three months and over twelve years; horses used for stage coaches, omnibuses and cabs, hacks, hunters and race-horses, as well as horses used for military purposes.

To the 6th group I would reckon all other moveable property of the farmer, as clothes, furniture, *futons*, cooking utensils, etc.

There are many practical difficulties in the insurance of these two groups, which are not of a purely agricultural character and may therefore be left to other kinds of insurance. If, in consequence of the introduction of agricultural insurance, the idea of insurance spreads more widely in Japan, industrial insurance will certainly follow in time, as the fire insurance on moveables in other countries followed after the insurance of immoveable articles.

§ 50.

It seems to me the best way to make this or a similar *classification of insurable objects* the basis for organizing agricultural insurance in Japan, and not to base insurance on a classification of the risks. Groups I and II will form a system of crop insurance; group III include cattle insurance, and group IV house insurance.

Since European insurance was not formed on a systematic plan, but piece-meal, and often as a private speculation, we find both principles of classification mixed together. Insurance of Cattle followed the principle of classification of insurable *objects*, while hail and fire insurances are based upon a classification of *dangers*. The result of such unsystematic classification is, for instance, that cattle may be insured in two ways, and that through the carelessness of the company or dishonesty of the insured, an insured member may get double payment on

them in case of a fire. In this there is even an element of danger, for as soon as a member can make a profit out of a fire it becomes an inducement to incendiarism.

Were one to take the different kinds of danger as the principle of classification, this would have many disadvantages. Experience shows, no one would insure of his free will against risks of rare occurrence. A special insurance against tidal waves, eruptions and typhoons, would not be required often enough to justify the establishment of special organizations of insurance. And yet how dreadful are the consequences of these mighty phenomena and how numerous, often amounting to many thousands, are the families which they ruin. The benevolent collections which are made at such times are quite insufficient and generally amount to only a few '*sen*' or at the most a few '*yen*' per head. One might say that these unfortunate creatures have to thank the adoption of a false insurance classification for their total ruin, for as soon as *objects* were made the basis of insurance, these same persons could be secured against all dangers (with certain limitations in the case of some risks). This is what I formerly called "*Collective Insurance*." This principle, in the unsystematic insurance method of Europe, was only carried out in Cattle Insurance.*)

* Thus, the "General Cattle Insurance Company of Brunswick" declares § I. line 1, of its bye-laws:—

"The cattle proprietors form themselves into a mutual society for insurance against all losses arising from unavoidable slaughtering, or the death of horses, mules, asses, neatstock, pigs and goats, owing to:

I. Contagious diseases and such ailments as come by the course of nature.

I consider for the above given reasons that this principle of collective insurance against *all* dangers is of importance as a principle of classification for a systematic agricultural insurance. Hence my motto is "*Insurance of objects against a collection of dangers.*" A further advantage arising from the use of this principle is that besides giving to the insured and consequently to his creditors a more perfect guarantee, it also makes possible a simpler method of premium-allotment and consequently a cheaper management.

Hence we have the following schedule :

The whole : "Agricultural Insurance "

Its parts :

I. Insurance of crops, including :

- a. Fruit bearing ground and soil.
- b. The harvested crops.
- c. The harvest in the ear, on the tree, etc.
- d. Agricultural implements.

II. Cattle Insurance (limited for the present to horses and neat-stock).

III. Insurance on buildings.

§ 51.

For crop insurance we can take the land tax assessment as a *standard for the premium allotments*, for cattle insurance

II. *Unintentional accidents or fires.*

III. Also against the loss arising from the unserviceableness of horses suffering from stupidity, if the same have been insured already for an unbroken period from Easter to Michaelmas in one and the same year, without having suffered from this sickness."

a cattle assessment, for insurance on buildings a valuation of them.

If the objects insured are exposed to some special, often occurring danger, as, for instance, certain districts are exposed to inundations, one will proportionately raise the assessment of the objects which are exposed to extra danger, but only for the allotment of the premiums, not as giving a right to claim higher damages.

The *simple* value will be used in each of the classes of insured objects as the *maximum limit* of damages payable in *one* year :

*Maximum of
damages :*

Crop Insurance :

Ground and soil....the value of the land tax assessment	100%
Harvested crops,....from the value of the land tax assessment of the ground and soil	x%
Crops in the fields, etc....from do	y%
Agricultural implements....from do	z%
Cattle Insurance....the value of the assessment	100%
Building Insurance....the value of the assessment	100%

If a loss arises, the insured must report it, and within a certain period, its magnitude must be ascertained and its cause determined. The total or partial or non-payment for the loss will depend on the cause. (See above § 31).

§ 52.

It is not at all necessary that the whole of the associated bodies of assurance associations spread over Japan should bear *the whole* of the losses covered by insurances. It would be more advantageous, if the losses be *divided* in different ways amongst the various great

divisions of the organization. If we think of each province as managing its own local insurance, then the *provincial* insurance company might bear, say, one fifth of its losses entirely, and the remainder be borne by the whole body. By this means the provincial association would have a keener interest to keep the payment of the compensation within proper limits. If the whole loss were borne by the general society, local interest would prompt many local associations to get as much as possible for their province at the general expense; if a majority of the provinces acted so, insurance would become much dearer.

This desire to control the just awarding of compensations, has resulted, in the Grand Duchy of Baden, already in the *local* cattle insurance companies bearing $\frac{1}{5}$ of the losses and the remaining $\frac{4}{5}$ only being borne by the *provincial* association.

It would be going too far into particulars in this work, which is only intended to give a general outline of the eventual undertaking, were I to state for each of the numerous dangers what grounds there exist for a different distribution of the compensation amongst the general and the provincial (and the district? and the parochial?) associations and the insured individual (See above § 31). Only I wish to repeat the remark that this distribution offers *no difficulties at all*, as it can be done in the office of the provincial association by very simple entries and calculations (See above § 32).

From the sum total of compensations paid by the pro-

vincial insurance association during the course of a year, the following deductions would have to be made :

- a.* Repayments from the general main society of all Japan ;
- b.* Repayments from possible district and local associations (divisions of the provincial society).

To this remainder, however, there must be added as expenses :

- c.* The contributions from the provincial to the central society to meet losses, reserve fund and management expenses of the main body ;
- d.* The cost of the provincial management itself ;
- e.* The contribution to the provincial insurance reserve fund.

All this separated in the accounts for the three groups : namely crop,-cattle-and building-insurance.

§ 53.

By way of appendix I may point out that in many cases in which the insurance company has paid the losses over to its members, reasons will exist why the state or the provincial treasury should return to the company the whole or a part of the paid damages. To these cases I reckon devastations caused by :

- a.* War and rebellion,
- b.* Inundations,
- c.* Some kinds of insects,
- d.* „ „ „ diseases of plants,
- e.* „ „ „ „ „ cattle.

Under *a.*)—War and rebellion are not concerns of the individual citizen but of the community. The community therefore should properly bear the costs. It is true that this principle is not generally recognized in Europe, far from it; but we have some examples of its recognition. For instance, Germany made good out of the war indemnity, the losses sustained by German shipping during the Franco-German war. Mr. Childers has now a bill before the English Parliament to indemnify citizens of London for their losses during the late social riots. China asks from the United States, on the ground that the community is responsible, an indemnity for her subjects injured in the Californian disturbances. European states have often received indemnities from Oriental countries exacted on the same principle.

Under *b.*)—For river inundations, one or more provincial governments are generally responsible: for failure in caring for the protective forests on the mountains, the silting up of river beds, for the decay or insufficient height or strength of the dykes etc. Still no legislation has ever yet provided for a total or partial payment by the state or province in such a case.

Under *c. d. & e.*)—From the point of view, that it is easier in the general interest of the country to meet the encroachment of diseases amongst plants and cattle and the ravages of insects, if the individual sufferer receives damages from the general means, Prussia pays from the *State Treasury* a compensation for vineyards damaged or destroyed by the *Phylloxera*. For cattle killed by order

of the police or known to have died of a murrain, Prussia pays a compensation on the basis of the common value, generally amounting to the whole, but in certain cases only to a part, as in glanders only to $\frac{3}{4}$, and in pulmonary consumption only to $\frac{1}{3}$ of the common value. This is all paid from the State Treasury, only in cases of glanders and pulmonary consumption does the provincial association bear the burden. Here we have a kind of compulsory mutual insurance. The provincial associations have to allot the requisite expenses, in accordance with a special bye-law, among all the possessors of horses, asses, mules, and correspondingly of neatstock. A similar compensation may be awarded by a resolution of these associations for sheep which have died of the pock.

SECTION C: Facilities for Saving.

CHAPTER I.

Provincial Savings and Land Credit Institutes.

§ 54.

A Provincial Savings and Land Credit Institute would be nothing else than a German Savings Bank such as can be seen worked by Provinces, Districts and Communes, in more than a thousand of cases, under their full guarantee. The German Savings Banks are the greatest Land-Credit institutions, even more important in this way than the "Mortgage-Banks" (*Hypothekenbanken*) themselves. I shall here make a lengthy extract from C. Roscher's "Postal and Local Savings Banks in Germany" (1885), p. 59 et seq.

"Among the means of investing the moneys of Savings Banks, mortgaging is with us the most important, as may be seen by the following table :

The Savings Banks in	Year.	Total Active Capital in million silver yen.	Mortgages in million silver yen.	Percentage of the Active Capital.
Prussia.....	1882	470	260½	55%
Bavaria	1882	29	16½	58%
Saxony.....	1881	93½	66½	71%
Baden	1881	39	27½	71%
Totals		631½	371½	59%

C. Roscher hence estimates that out of the 750 million silver yen which are invested in all the Savings Banks in Germany, about 450 million silver yen are invested in Mortgages.

"Hence, of all institutions which are available for mortgage loans, the Savings Banks are, for us, the most important." For at the end of 1880, the 32 German Mortgage Banks only held 397 million silver yen of mortgages.

"This is especially the case in Saxony. For the five great Land Credit Institutions of Saxony do not altogether possess half as much in mortgages as the Savings Banks. The condition of the Banks at the close of 1882 was as follows; they possessed mortgage-claims:

	Million silver yen
Erbländischer ritterschaftlicher Creditverein.	11½
Landwirthschaftlicher Creditverein	8½
Landständische Bank der Oberlausitz	5½
Allgemeine deutsche Creditanstalt	4½
Leipziger Hypothekenbank	½
Total.....	29½

"On the other hand the Saxon Savings Banks had 71 millions in mortgages.

"The average amount of interest on their mortgage loans received by all the Saxon Savings Banks in the year 1882 amounted to 4.607 per cent"—"a fact which shows that the Saxon Savings Banks make loans on land at a low rate."

"The mortgage-business of the Savings Banks gains additional importance from the fact that it is almost

entirely done in *small transactions* such as most Mortgage Banks will not undertake at all."

By way of example C. Roscher adduces numbers from which it is evident that, leaving the urban savings banks out of consideration, from 31 to 44 per cent of the mortgages granted by Savings Banks are in sums under 250 yen, and from 63 to 82 per cent in sums under 750 yen :

Savings Bank.	Year.	Out of 100 mortgage claims there were						
		below 125 yen	125 to 250	250 to 750	750 to 1250	1250 to 1500	1500 to 7500	over 7500
Tharandt	1881.	15	17	35	11	14	7	1
Scheibenberg ..	1882.	18	20	32	9	12	8	1
Jœhstadt	1882.	15	29	34	11	7	4	—
Grossrœhrersdorf	1882.	9	22	51	10	5	3	—
Rœtha	1883.	14	21	28	9	10	16	2
Dresden	1883.	—	0.5	1	5	21	56.5	16

C. Roscher estimates the number of mortgage-debtors to the Saxon Savings Banks at 95,000 (about $\frac{1}{32}$ of the population of Saxony) and the average of Savings Banks mortgages at 750 silver yen ; whereas the mortgage-debtors to the Mortgage-Banks are 7500 with an average of 4925 silver yen.

"As most Savings Banks limit their sphere of operations to their own immediate neighbourhood, they are able more easily and more constantly to watch over the circumstances of their debtors and the condition of the real estate mortgaged to them than can bigger institutions, which extend their sphere of operations over a wider area. Hence it naturally follows that without weakening the security of the investment, Savings Banks can afford to give more

generous terms than the bigger institutions which are moreover obliged to work more on hard and fast lines."

Roscher next alludes to an arrangement of Savings Banks to receive *small*, regular or irregular, repayments of loans, in sums of not less than 5 thalers ($3\frac{1}{4}$ silver yen), thus making it possible for smaller debtors to free themselves from debt gradually and without feeling it. "The surplus payments credited to the debtor at compound interest at the *same* rate as that on the debt are purposely intended to be written off against the debt. If however the debtor should again find himself in pecuniary difficulties he may at any time receive advances on such credit, and, under certain circumstances, even a fresh loan.

"Under certain circumstances and conditions the repayment of advances for short settlement is permitted in small instalments, viz., for every thaler (75 sen), one Groschen, ($2\frac{1}{2}$ sen) may be paid back weekly.

According to a paper by Ehrenberger on "The Austrian Savings Banks" (Vienna 1873), the active capital under the administration of all the Austrian Savings Banks is divided as follows: about 60% is invested in Loans upon land, $16\frac{1}{2}$ % in bonds, 10% in loans for short periods, lombard advances upon bonds come to 5%, 4% goes to discounting bills, 2% represents the cash in hand, the fixtures amount to $\frac{1}{4}$ %, and the other transactions to a little more than $1\frac{1}{4}$ %. The effects almost entirely consist of tithe-redemption-bonds (Grundentlastungsobligationen), mortgage-debentures and government securities. Ehrenberger notes with satisfaction, that in half a century no

Austrian Savings Bank has lost by bad investments to such a degree as to injure the depositors or break up the institution.

From the special report of Ehrenberger on the principal Austrian Savings Bank, that is, "The First Austrian Savings Bank," I will only quote some data about mortgage loans. In the end of the year 1872 the amount of mortgage loans of this bank amounted to over 20,000,000 silver yen or 44.15% of the whole active capital. The distribution of the same between urban and agricultural real estates was as follows, (with a preference for the urban securities by the *urban* savings bank):

Loans on urban securities to 15,317 persons, 18,106,943 s.-yen.

Loans on agricultural securities to 6101 persons, 2,588,006 s.-yen.

Total loans to 21,418 persons, 20,695,959 s.-yen.

According to the amount of the loans granted, we obtain the number and sum total of the individual items as shown on page 95.

The table proves that this bank also was principally engaged in helping small owners of land and houses with mortgage loans. According to it the majority of loans fall between 300 and 5,000 florins (150 and 2,500 sil.yen). Loans which amounted to over 100,000 florins were 20 in number at the end of the year 1872.

As for the number of years stipulated for the repayments, 15,264 loans were on a 20 years period; 6050 loans on one of 25 years. The remaining loans had limits from 10 to 41 years.

According to the amount of the loans granted the number and total value of the items were as follows:—

Original Loan.				Individuals.	Amount of Debts.	
					fl.	kr.
	fl.	fl.				
		300	2,107	328,871	31	
from	300	to 1,000	7,650	3,613,451	9	
"	1,000	" 5,000	9,410	16,443,964	15	
"	5,000	" 10,000	1,441	7,967,370	35	
"	10,000	" 20,000	566	5,685,213	21	
"	20,000	" 30,000	142	2,346,259	93	
"	30,000	" 40,000	34	665,719	33	
"	40,000	" 50,000	24	764,562	73	
"	50,000	" 60,000	10	358,611	34	
"	60,000	" 70,000	4	212,982	30	
"	70,000	" 80,000	4	83,921	56	
"	80,000	" 90,000	3	129,322	41	
"	90,000	" 100,000	3	165,765	71	
"	100,000	" 110,000	2	115,739	30	
"	110,000	" 120,000	2	201,000	—	
"	120,000	" 130,000	2	181,796	83	
"	130,000	" 140,000	1	61,850	25	
"	140,000	" 150,000	3	428,863	16	
"	150,000	" 160,000	2	141,750	—	
"	160,000	" 170,000	2	267,000	—	
"	190,000	" 200,000	3	355,857	22	
"	240,000	" 250,000	1	237,500	—	
"	290,000	" 300,000	1	102,786	91	
"	570,000	" 580,000	1	532,238	56	
Totals.				21,418	41,391,897	65

Mortgaged houses must be sufficiently insured in a recognized Austrian Fire Insurance Company.

Advantageous as such kind of mortgage loan is to the debtor, the privilege accorded to the latter of paying back the debt by small instalments spread over many years, has the disadvantage that by this means only a small portion

of the invested capital comes back every year to the funds of the institute.

It is true that the institute has reserved to itself the right of 6 months notice, but even when there has been the greatest need by a run for savings withdrawals, the institute has never yet made use of that right.

Since therefore in view of the slight mobility of the capital so invested it did not seem advisable to further increase the mortgage loans, this Savings Bank found itself induced in the year 1869 to establish a mortgage debenture institute, which was opened on the 1st of May 1869 under the sanction of the Home Ministry.

§ 55.

These mortgage debentures are acknowledgements of the Debenture Institute of the First Austrian Savings Bank by which the holder is guaranteed the subsequent half yearly payment of interest and the total liquidation of the capital debt, the numbers of the debentures repayable at a time to be determined by lottery drawing. For the punctual payment of interest and capital on the debentures issued, the Mortgage Debenture Institute answers principally on the totality of the mortgages placed to the credit of the Institute, and further on the guarantee fund and on the other property of the bank.—The sum total of debentures issued may never exceed the sum total of the mortgage loans and of the redemption fund.—The redemption fund is formed of the stipulated instalment repayments on capital made up to date and upon the

voluntary repayments in cash which have been made by debtors.

For further information upon the nature of the mortgage debentures and their great advantages, for the capitalists, the issuing institute, and the debtors, I must refer to my paper on "The First Japanese Mortgage Debenture Institute—a proposal for the Kazokukaikuwan," which was published in 1883 and translated by Mr. Hanabusa Naosaburo.

The advantage arising from these debentures is according to Ehrenberger as follows :

I. It sets the Savings Bank in a position to grant liberal and cheap money assistance to the landowners independently of all transactions at the counter.

II. The Savings Bank can at any time buy back its own debentures, and thereby acquires securities which are undoubted and which are by their nature exposed to no important fluctuations of value.

III. When there is a great run on the bank it can sell these debentures in the exchange, and so easily raise money, whereas simple mortgages can not be sold at all in the public exchange, with great difficulty in private, and only rarely without loss.

IV. The Savings Bank can make advances on the security of debentures. Thereby she increases the circle of securities, the making of advances, upon which gives her the opportunity of investing her moneys for *short* periods.

§ 56.

What we have hitherto said about German and Austrian

Savings Banks and especially about the bank at Vienna, ought to show us that banks of this kind which are of use to land credit are just what Japan needs; but since there is not yet in Japan any local independent administration, nor any county assemblies, *for the present* we suppose that no local or district savings bank with independent powers of management and investment will be established. The first care will be to found provincial savings banks, savings banks as I have named in the title of this section, in order more clearly to bring into prominence their double nature, "Provincial Savings Banks and Land Credit Institutes."

According to Dr. C. Bötzw's article in the Journal of the Royal Prussian Statistical Bureau for 1884, on "the Prussian Savings Banks in the financial year 1882," there were in Prussia (independently of other kinds of savings banks) the following banks managed or guaranteed by towns, parishes, market towns, communes, districts, circuits, provinces, or provincial Estates:—

Kind of Institution.	Banks.	Branches.	Agencies.
I. Town Savings Banks	517	2	101
II. Parochial or Communal Sav. B. ..	104	2	4
III. County Savings Banks	280	174	387
IV. Districts „ „	8	—	—
V. Provincial „ „	5	110	—

What was possible in Prussia in more than a hundred parishes and communes and in 280 counties, will certainly also be possible for Japan if only the right method be pursued. Hence we have no practical need to establish only *one* Savings Bank and Land Credit Institute for the

whole empire. As each province has a provincial assembly, and as the provincial banks require supervision as well as efficient guarantees, they must only be established with the consent and under the guarantee of the provincial assembly and under the supervision of a board established by the assembly, (very often a standing committee of the latter). They will be at the same time a result and a support of *selfgovernment*. The provincial governor may bear to them the same relation which the Prussian "Oberpresident" has. The latter has the power, within certain limits, to sanction their establishment, and to permit or refuse to pass the bye-laws. The State supervises communal Saving Banks just like other communal institutions, yet (cf. Decree on Savings Banks 12nd Dec., 1838, §§ 19.20) it is the duty of the said presidents and district governments "to pay constant special attention to these institutions, to convince themselves of the practical character and the methodical arrangements of the management, to undertake or cause to be undertaken extraordinary inspections, and where they find disorders or abuses to insist earnestly on their reform. Further the said presidents should every year obtain reports on the business and results of each bank, and present to the Home Minister a carefully compiled, comprehensive report for the whole province."

Probably until the legislative power has granted other items of self-administration to the provinces, the Japanese governor will receive wider duties and powers than the aforesaid president.

§ 57.

I would suggest that the debenture institutes which are to be established in each province in connection with the provincial savings bank, should be brought into a certain connection by means of a *central* mortgage debenture institute. According to the experience of other countries it would be more difficult to negotiate in the stock exchange the debentures of 40 provincial institutes, than to negotiate the debentures of only *one* central institute. Being in less demand, less frequently bought and less frequently used for investment, they would not command an equally high quotation on the Bourse. The activity and work of the central institute would in fact be very simple. It would take up all the debentures of the provincial institutes with all claims against the latter; not however for money, but in exchange for central debentures. The individual provincial institute would always be putting only central debentures into circulation, and the central debentures would be paid at the same rate of interest and redeemed in the same way as the provincial mortgage debentures in the hands of the central institute.

It would be premature to speak here about the other connections of the central debenture institute with the provincial ones.

§ 58.

The Provincial Savings Bank and Land Credit Institute has always two sides to its activity. Hitherto we have

principally spoken about the *investment* of their funds ; it remains for us now to speak of the *collection* and *attraction* of savings.

We saw that the farmer has need of his savings for two purposes :

I. As working capital.

II. As capital reserve for bad years.

It is therefore desirable that there should be offered to him a double arrangement for savings, one which can quickly put him into possession of his invested moneys, and a second which on the contrary makes it difficult for him, to withdraw prematurely in years which have been favorable to him. This double arrangement I propose to offer him in

- a. Parochial Postal Savings banks,
 - b. Rural Savings Unions.
-

SECOND CHAPTER.

Parochial Postal Savings Banks.

§ 59.

By Parochial Postal Savings Banks I mean no independent savings banks but savings banks, in which the village with its 'Kochō' (headman) at its head, aided by the nearest Post Office, and in connection with the Central Post Office Savings Bank in Tokio plays the same part as a school with its teacher at its head does in the system of postal school savings banks. As the Educational Society of Japan will in the next few weeks, publish a detailed treatise of mine on "Postal School Savings Banks," translated by Mr. Omura Nitarō,*) I may take the liberty of referring to the same, since I have shown in it accurately how by the use of various interest bearing and non-interest bearing tokens, all writing, book-keeping and interest calculations for the local branch and even the keeping of the depositors' accounts for the individual depositor at the Central Office may be avoided.

If in the school Savings Banks tokens of one *rin*, one *sen*, and ten *sen* are used, in the Parochial Savings Bank tokens of one *sen* and ten *sen* only will be used, with the possible addition of a 50 *sen* token.

*) Since published.

The 'Kochō,' his substitute, or a representative elected by the villagers will take the place of the managing school teacher.

In a word, the changes necessary to adapt the system of school banks to parochial banks are very unimportant. If in France more than 21,000 school banks were established in a few years, it would be easy in Japan to establish several tens of thousands of parochial savings banks. For it is quite certain that there is not a village in Japan which could not furnish a person qualified as far as order, honesty, and the required amount of intelligence go, to look after such work.

Of course the deposits are voluntary. Without taking a long journey to the nearest Post Office, which is perhaps in another village, the farmer simply buys from the Kochō or his representative a token representing the value of his deposit.

§ 60.

I have already mentioned that the Post Offices of such provinces as possess a Provincial Savings Bank and Land Credit Institute shall be connected with this instead of with the Tokio Central Post Office for all paying in and out of savings. This, to the benefit of the provinces, will secure the money circulation in them, and will be a similar decentralisation of the credit system as that which was intended for Germany, by the provision in the bill on the Postal Savings Bank that instead of one central office for the whole empire, the chief office of each postal district

should act as a centre for that district, and provided for a distribution of the moneys over *many* different places.

§ 61.

The organization of the Parochial Postal Savings Banks does not fall to the lot of the Provincial Savings Bank and Land Credit Institute, but to the General Post Office. This is a wholesome division of the labour that has to be done. The establishment of the insurance facilities will already task the provincial bank to the utmost.

THIRD CHAPTER.

Rural Savings Unions.

§ 62.

The Rural Savings Unions are intended to assist the farmer in saving for the express purpose of having something to fall back on in bad years.

Savings Societies *for specific objects* are very common in Germany, and are of the most varied kinds; there are for instance, societies for the dower of grown up sons and daughters, (sometimes called “confirmation savings societies”), societies for laying by for house rent, or for taxes, or for winter requisites; in short, for a long list of objects, which unavoidably at a certain time require a certain amount of money. To these we might add the numerous sick funds, burial funds, and funds for increasing civil or military pensions. I adopt the words of Mr. Burgomaster Kuntze in his valuable work “Saving Banks and Communal Finances” (Berlin, 1882 page 64) :

“It would be beyond the purpose of this paper to enter more fully into these Savings Institutions, especially as there are no sufficient statistics ready to hand. But in order to give you some small idea of the importance of this question we may mention that in the town of Plauen (of 35,000 inhabitants), there are, as far as we know, 2

Savings Unions, 5 Sick Benefit Funds, 4 Burial Clubs, 1 Additional Annuities Fund, and 3 Military Societies. In Dresden, according to the Guide Book for 1875, there were 41 Sick and Burial societies, 1 Teachers Annuity Fund, and 3 Military Associations."

§ 63.

If Savings Unions work hand in hand with a Central Savings Bank, their payments are made upon so called stopped savings accounts. These are called stopped because disbursements on such pass-books are only made after giving satisfactory proof of the occurrence of a certain event previously named.

Now the circumstance, on account of which in the Rural Savings Unions of one province repayments are to be made to the Depositors, is a bad money year for the farmers of that province. The farmers themselves know best whether it is a bad year or not, and without much reckoning. A sufficient proof for the Provincial Savings Bank and Land Credit Institute that there had been a bad year and that therefore the moneys entered on the stopped accounts should be paid out, might be found in a resolution of the farmers concerned or of their representatives or if such were not liked, in a resolution of the Provincial Assembly or of a Committee of the same. As soon as such a resolution is come to it is open to all the members of the different Rural Savings Unions of that province to withdraw savings from the bank.

§ 64.

In a Rural Savings Union every member would assess himself and his powers and promise a regular contribution suited to himself. If he pays his self-imposed contribution regularly and at the right times he will obtain more favourable conditions than he would otherwise. If he omits all the contributions which he promised before, it may for example be determined that his already deposited money shall lie without interest till the time when the stop ceases. Irregular and insufficient contribution can then less stringently be punished by a lower rate of interest fixed on a plan, which has been agreed upon before hand. In this manner the members of the savings society train themselves to regular economy.

SECTION D: The Deliverance of the Farmer from the hands of the Usurer.

INTRODUCTION.

§ 65.

As long as the economical institutions of a country are insufficiently or faultily organized, as are those of Japan, the usurers will find many opportunities of sucking the blood of persons who have come into misfortune without deserving it.

The consciousness of the people itself and of its legislators revolts at seeing whole classes undeservedly sinking into misery. This has in the world's history led more than once to disencumberments of debtors, acts of relief which have been often violent, rarely peaceful. Even in the time of Solon, the renowned legislator of Athens (B. C. 594), there was in Athens a debtor's and a creditor's party. One of his great legislative acts was to lighten the burden of debts which oppressed the lower classes. The long violent struggles between plebeians and patricians in Rome, were not merely political struggles for obtaining a voice in the government, but quite as much economical ones for the purpose of easing the plebeian from his burden. This can be seen in the fact that when in the year 366 B. C. the struggle between Patricians and Plebeians was set aside

by the so called Licinian Laws, one of them provided that in order to ease the debtor interest already paid should be deducted from the capital.



FIRST CHAPTER.

The Japanese Interest Limitation Law of 11th Sept., 1877.

§ 66.

The present government of Japan tried to influence the movement of the rate of interest by a law which is still in force for the whole country. It decreed on the 11th Sept., 1877, "Interests are divided into contract interests and legal interest (Art. I.). The former may be agreed upon by mutual contract as follows,

for loans of under 100 <i>yen</i> ,	under 20% p. a.
from 100 to 1000 <i>yen</i> ,	„ 15% „ „
over 1000 <i>yen</i> ,	„ 12% „ „

If people exceed these limits, the interest cannot be recovered in a court of law except so far as it falls within these limits (Art. II). Legal interests come into force when nothing is mentioned in contracts about interest and the court has to decide. This is limited to 6% for all amounts (Art. III). It is illegal to raise the rate of a contract interest beyond the statutory limits by *previously* deducting a commission, or the interest from the capital loan. (Art. IV). If it be agreed that the debtor, should he fail to pay his debt at the time when it becomes due, must pay to the creditor a fine or similar payment, this is

only regarded as a recompense for injuries received. If the judge considers the recompense has been out of due proportion to the injury he may set aside such agreement, (Art. V)."

Hence we see the government takes no action against the creditor for overstepping the various rates of interest; only it will not grant the strong arm of law for the protection of him who demands exorbitant interest or excessive fine. At the same time it establishes the, for Japan, exceedingly moderate rate of 6% legal interest, in order that where possible the defined clearness of an agreed contract-interest may be called into operation.

§ 67.

The following considerations may aid us in determining the efficiency or inefficiency of the interest law :—

I. When I had the honour of being councillor to the Finance Department, the Prefectural Government of Tokyo gave the following answer to a question addressed to them by me on the subject of the rate of interest obtained for mortgages on stone buildings, at the same time enclosing an extract from the House-Mortgage register: (*Tate mono kakiiri shichi*): "In mortgaging fire proof buildings ("Dozō"), &c. the legal rate of interest is observed, but apparently the creditor previously obtains a commission (*tesuriō*) in addition to the interest. We are not in a position to institute an enquiry into the *Tesuriō*; but the result is to raise the rate of interest. Hence we cannot accurately state the amount of interest."

Art. 4 of the law which was intended to limit the raising of rate of interest by previous deduction of interest and commission-fees, is consequently inoperative. Moreover amongst the instances given by the Tokyo Prefecture there were some in which for sums of from 100 to 200 *yen*, interest at 20% to 18% was obtained, excess of 5% to 3% over the maximum recognized by law. In all other cases loans of 100 to 350 are quoted at 15%, the exact limit recognized by law. But as most probably a commission had been previously deducted in every case, we may say that in every case the legal maximum had been exceeded.

Now if this be the case in Tokyo, the place to which the money from the whole country keeps flowing abundantly, what must be the case in the provinces? How will the maximum limit of interest be exceeded there!

§ 68.

2. According to the monthly interest statistics, published in the Commercial Reports of the Ministry of Agriculture, Commerce and Industries, I can answer the same question for loans of from 5000 to 10,000 *yen*. Unfortunately, however, for several months these statistics are incomplete; but from July, 1879 to May, 1881, I worked up these monthly statistics for Tokyo and Fukuoka into a convenient table, and where the items for one place were not supplied, I left out of calculation those supplied for the other place so as strictly to equalize the calculation. I then found that for great loans on five kinds of securities, the average rate in Tokyo was under 12%, in Fukuoka,

far above that sum. In Tokyo it was 11.8%; in Fukuoka 19.8%. Here is the table.

The Average Rates of interest for loans between 5000 and 10,000 yen in Tokyo and Fukuoka.

Security.	Time.	Rate of interest.	
		Tokyo.	Fukuoka.
Government bonds..	From July 1879 until Ap. 1881	11.7 %	18.1 %
Land and Houses ..	" " 1879 " May 1881	11.9 "	21.3 "
Rice and Corn	" " 1880 " Ap. 1881	12.0 "	21.6 "
Various	" " 1879 " " 1881	11.9 "	22.5 "
Without mortgage..	" " 1879 " June 1880	11.8 "	13.8 "
Average from 84 monthly data of all these 5 sorts of loans:		11.8 %	19.8 %

Hence, in Fukuoka, the law was wholly inoperative in every case. In Tokyo the allowed maximum was observed; but this was due, not to the law, but to the greater circulation of money and the better credit arrangements.

§ 69.

The inefficiency of the interest-law is still more clearly demonstrated by the following: Table 16 No. 8, in the "Commercial Reports of the Commercial Bureau in the Ministry of Agriculture Commerce and Industries," has notices on loans from 5000 to 10,000 *yen*. Under seven kinds of securities we have there the average rate at eight commercial towns for every month of the 12th and 13th financial years (1879-80 and 1880-81). Of the 1344 squares in these tables, 705 are filled. Of these 705, 95 are within statutory limits, and 610 exceed them. Thus illegal rates

bear, to allowed rates, a proportion of 642 to 100! The allowed rates vary from 9 to 12% (exclusive), whilst the illegal ones vary from 12 (inclusive) to 33.6%.

A survey of these cases, as divided amongst the various loan-objects, shows that land, ground, and soil are most exposed to usury. Next to them come rice and crops. Hence it is the *farmer* who suffers most from the usurer.

**Average Rate of Interest for loans of from 5000 to 10000
yen in eight commercial places.**

Security.	Number of Cases :		
	under 12%.	at 12%.	over 12%.
Government bonds	35 times	37 times	73 times.
Ground and Houses.....	5 "	20 "	95 1 "
Uncoined Gold and Silver	17 "	10 "	25 "
Rice and other grains	8 "	22 "	67 "
Silk	1 "	21 "	24 "
Various	12 "	35 "	92 "
Without Mortgage-security ..	17 "	16 "	73 "
Total..	95 "	161 "	449 "

If, in order more clearly to understand the distribution of loans among the various securities, we reckon the number of loans at 12% and under at 100 in every case, we get the following results:—

Security.	Ratio	
	of cases of 12% and under	to those of over 12%
Uncoined gold and silver.....	100	to 93
Government bonds	100	" 101
Silk	100	" 109
First group.....	300	to 303
or.....	100	" 101

Various	100	to	196
Without mortgage-security	100	„	221
Rice and crops	100	„	223
Second group	100	to	640
or.....	100	„	213
Ground and houses	100	to	380
RECAPITULATION.			
Security:		Ratio of cases of 12% and under to	
		cases over 12%.	
Group I. Bullion, bonds, silk	100	to	101
Group II. Rice, corn, and personal			
mercantile credit	100	to	213
Group III. Land and buildings	100	to	380

§ 70.

It is clear from this comparison how land and buildings are by far the most unfavourably placed for credit purposes in Japan. They lack the credit institutions suited for them, whereas other branches of Japanese industry, especially commerce, have the banks offering them credit.

I think I have shown in the above three cases how completely inefficient was the Japanese law on the rate of interest. If it was inefficient for loans between 5,000 and 10,000 *yen*, and for those over 100 *yen*, it must have been far more inefficient for loans under 100 *yen*.

We may therefore with safety conclude that for years the Japanese farmer has suffered from usury far beyond the allowable limit. I have indeed no more recent statistics, but the frequent disturbances caused by rural debtors speak as eloquently as statistics.

• § 71.

Is it not possible then for the Government to use the existing law for the alleviation of the farmer?—Of course

at present the farmers will only come extremely rarely to complain to the law court about the rates of interest. For though it is true that they might obtain a diminution of the usuriously increased debt, yet as the debt itself and the future interest-obligations which amount to 15% or 20% still remain a debt legally due to the creditor, in spite of the exorbitant, usurious rate proved against him, the farmer still remains in the hands of his creditor, whom he has now succeeded, moreover, in enraging. With claimable interest at 15 or 20% he must always expect to lose house and farm if he can not liberate himself at once from the whole debt. Hence there is a double task:

- I. *It must be made easy for the farmer to obtain deliverance from the usuriously exorbitant interests which have been exacted from him over the allowed limits ; and*
 - II. *He must be freed at once for the so diminished debt from the hands of his creditor.*
-

SECOND CHAPTER.

The Commutation of Peasant Mortgage Debts.

§ 72.

As in Prussia, an important part of the legislation of Stein and Hardenberg consisted in the amelioration of the condition of the peasantry, by commuting the duties and services connected with tenure of land, and by the abolition of rights to the common use of land, and of the services, reciprocal or non-reciprocal, arising therefrom; as in Prussia, the State has for this object displayed much vigorous energy in overcoming the serious obstacles which stood in the way; as in Prussia, more than two millions of peasant proprietors were freed from pressing obligations ("*Servituten*"), so Japan should, by a similarly energetic legislation, and by displaying an extensive activity in administration, seek to improve the condition of the Japanese peasant.

In Prussia the task was to provide a remedy for the absence of personal independence arising from the former custom of thralldom and copy-hold tenure; here the task is to provide a remedy for the indebtedness of the peasantry which arises from the recently introduced system of money-

payments,—debts which have become more oppressive from the fact that during the last few years the paper-money in which the debts were incurred, has risen considerably in value. Hence, interest and capital of the debts must both be paid with money which is worth more than it was when the debt was incurred. If the Japanese Government could, for reasons of public welfare, undertake to commute the very ancient family pensions of the nobles and gentry, and thereby at the same time to diminish them and make the burden press less heavily upon the people, it could also, for similar purposes, undertake to carry out a similar commutation of the debts of the rural population. For Quesnay's exclamation is still always true: "Poor peasant, poor land; poor land, poor king"; or we might say with still deeper import: "Poor farmer, poor land; poor land, weak land!"

§ 73.

In Prussia an Annuity Bank ("*Rentenbank*") is used for this purpose; it extinguishes the claims of the entitled party by giving him state-guaranteed annuity-letters ("*Rentenbriefe*"), and draws from the indebted peasant a rent, which slightly exceeds the interest of the annuity-letters, for so long a time as is required to redeem the capital of the annuity letters by employing this excess of rent, together with the saved interest on already redeemed capital, for the work of redemption. The rents are treated in the same way as state taxes, and collected with these. The letters are made payable to bearer,

and are gradually redeemed in proportion as the accumulated redemption excesses allow of the operation, the selection of the particular letters to be redeemed being made by lot. Hence, the technicalities in the system of annuity-letters are exactly the same as in that of mortgage-debentures.

§ 74.

In order to relieve the Japanese peasantry from their mortgage indebtedness we require a similar administrative apparatus as in Prussia. Prussia required :

1. District Arbitration Boards,—for promoting friendly settlement.
2. General Commissions for whole provinces,—these also decide in questions and litigations arising in the course of arbitration, and are consequently so far courts of first instance.
3. One Supreme Agricultural Court,—to decide upon appeals against decisions of the provincial General Commissions.
4. One Annuity Bank for every province,—to promote the liquidation of the burdens upon real property, and for the total abolition of the legal relations hitherto existing between entitled and obliged parties. This is done by means of “Annuity-letters” granted to the entitled, and by taking over to the Annuity-Bank the “rents” payable by the obliged party, in accordance with the decision of the Arbitration-Board.

So we require in Japan*):

1. In every county a district Arbitration Board to facilitate a friendly settlement between the peasant debtor and his mortgage creditor. This is brought into action on the motion of one or other of the parties concerned. This court will assess, according to the above-mentioned law of interest, the amount finally to be paid, after deducting from the alleged amount of debt, all interest in excess of the statutory limits, all commissions previously paid, and all excessive fines for prolongation of credit.
2. If a friendly settlement between the two parties cannot be arrived at, the question is brought as a litigious one for decision before the General Commission of the Province.

The Arbitration settlements moved at the General Commission will as a rule be worked out by special commissioners on the place of dispute.

The latter must then

- a. distinctly set forth the facts and legal circumstances of the case, as far as these have any influence upon the arbitration verdict ;
- b. point out the points in dispute which are left for the decision of the higher court according to the general directions issued, so as to prepare for a decision ;

*) I make use of the words of the Prussian law in the following explanation, in which, however, the term "arbitration" used there is limited here to mean "arbitration between mortgage debtor and creditor."

- c. do their utmost, nevertheless, to settle the matter amicably, and for this purpose not only assist the interested parties with well thought out proposals suitable to the circumstances, but also encourage every honest and reasonable suggestion for a solution ;
- d. they must, if necessity requires, carry into effect the settlements sanctioned by the General Commission.

The question of settlement, once opened, must be carried on continually and the negotiations are only allowed to be postponed for the further summoning of other interested parties and for speedy further pursuit, if indeed the circumstances of the case demand the delay or unavoidable hindrances oppose themselves. Accordingly the parties are required to be present in court not only on the day for which the summonses are issued, but also on all subsequent days during which the suit is in progress, these days being considered a continuation of one and the same term.

- 3. Instead of one Superior Agricultural Court for the whole Empire, for the decision of appeals against the findings of the General Commissions of the provinces, it seems to me more practical to strengthen the Commissions themselves by the addition of a few more members, so as to transform them into a court of second instance, and then to let a full meeting of the Commission (in the provincial capital) give a final verdict on the appeal.

4. The duties of the Annuity Bank will, in Japan, be undertaken by the Provincial Savings and Land Credit Bank.

§ 75.

Here we must call attention to an important difference between the various cases to be undertaken. In a great number of cases the sum to be paid to the person entitled to the debentures, and the corresponding mortgage taken over by the bank, will be within the prescribed loan limits of the Institution; but there will also be many instances where this will not be the case. For we suppose that for *ordinary* transactions a limit will be set to the Bank (e.g. one half of the value assigned to the land in the land-tax assessment). If the sum granted by arbitration lies within this limit there will be no difficulty, and the bank can at its own risk take the place of the creditor. If the limit be exceeded, the bank can for the excess not take the place of creditor at its own risk. Also one could not exact from the province, as such, that it should make itself responsible for the punctual payment of interest and capital on this excess. There still remains the means of giving security for this excess claim by a second mortgage outside of the statutory loan limits, and of forming from all these secondary mortgage claims (e.g. those which are between 50 and 66⅔% of the land valuation) one group which corresponds as a security to all the Second-Class Mortgage debentures issued against it. These "Second Class Mortgage debentures" would

not bear a regular interest, but *dividends* arranged according to the interests actually paid in by the debtors. Thus the original creditors, as a body, would have to bear irrecoverable deficiencies of interest, in consequence of their want of foresight in exceeding the actually practicable loan limits. The instalments received from the debtors are used every half year for the gradual liquidation of a corresponding amount of the debentures drawn by lot. If some of these second class mortgage redemption instalments fall out, the period of liquidation for the whole body of the debtors is correspondingly *lengthened*. Therefore the plan of liquidation for these second class mortgages cannot be one strictly limited beforehand by time. Then if some debtors, by not paying their instalments, lengthen the time of liquidation of the debentures, this should entail a corresponding *lengthening* of the time during which the other debtors would have to pay the instalments on their second class mortgages.

In the same way it would be possible to form third class mortgages of those mortgages which exceed 66 $\frac{2}{3}$ % of the valuation (going say from 66 $\frac{2}{3}$ % to 80%), and issue corresponding "Third Class Mortgage debentures"—with all the Third Class mortgages as security. The Provincial Savings and Land Credit Bank would accept no responsibility for such mortgages of the second and third class, but would undertake their administration for a small commission.

§ 76.

It would be no difficult matter to constitute and to

establish the above-mentioned authorities. For instance, they might be as follows :—

1. County Arbitration-Board,—President, the Gun-chō; members, the representatives of that county in the Provincial Assembly.
2. General Commission for the Province—five members; one, a secretary of the provincial government, appointed by the Home Minister; two members chosen by the Provincial Assembly; the rest, appointed by the Minister of Justice from the judges. The members appoint their own president from amongst themselves.
3. The Enlarged General Commission,—formed as court of second instance by the addition of four other members, two appointed by the Provincial Assembly, and two judges appointed by the Minister of Justice. The nine members appoint their own President from amongst themselves.
4. The Staff of the Provincial Savings and Credit Bank will also undertake the management of the second and third class mortgage-debenture systems.

The Provincial Savings and Land Credit Bank would be represented in every county by one agent. His duties will be, simultaneously with the progress of the arbitration, to take the necessary steps for receiving the mortgage debtor into the Crop, Cattle, and Buildings Insurance, and to assist in getting him into a Rural Savings Union, according to rules laid down for his guidance.

§ 77.

As far as the *costs* arise from arbitration, they must be borne by the interested parties, and as far as they arise from insurance, by the debtor. If, in the arbitration, there have been proved, or made credible, an overstepping of the statutory interest-limits, or exorbitant fines for prolongation, the costs will be mostly or wholly laid upon the shoulders of the usurious creditor.

In fixing the costs, certain fees and travelling expenses will be assigned by law to the persons officially engaged in the business. The State will grant a total remission of legal fees, stamp-duties, and postage, in order to alleviate the cost of arbitration.

This may suffice as a brief outline of the special legislation necessary for the establishment of Arbitration Boards.

§ 78.

The advantages arising from the liquidation of rural debts and the alleviation of the condition of the peasantry here described, seem to be great enough to warrant the State in undertaking the trouble of this legislation, and of the organization of these Boards. The advantages of these mortgage debentures, of the Mortgage Debenture Institute (i.e. of the Provincial Savings and Land Credit Bank,) and of the second and third class mortgage systems administered by the bank, are that by this means the State procures loans for the support of agriculture in amounts

hitherto unheard of in Japan, without throwing any perceptible burden upon the treasury, or requiring any sacrifice from classes of population which are not concerned in agricultural debts. A law which is shamelessly evaded or insolently overstepped by thousands of greedy capitalists, a law which has hitherto been only a dead letter, would be most advantageously and justly put into action, and thus the dignity of the Government and the respect due to the legislator would be preserved and increased.

The advantages to the debtor will of course depend on the *rate of interest* required for the mortgage debentures. In order not to dock the creditor in capital, such a rate of interest should be chosen as would allow these bonds to circulate at about their nominal value. For the present (Feb 1886.) the 6% pension bonds, and the 6% industrial bonds are quoted at 100,50; the 6% paper money redemption bonds payable in silver are quoted at hundred. Hence, for the present, a 6% rate of interest would be just enough. What import has this for the appreciation of our project? Let us remember that the debtors party in Izu obtained it as a concession from the creditors that new loans should only bear 13%, although it still remains an open question whether capitalists would in the future grant them loans or not, or whether, in spite of this "agreement," poor farmers would not be obliged by commissions deducted beforehand to pay much more than 13%. Let us remember, too, that according to the comprehensive statistics for eight commercial towns for

that period when the Bank of Japan did not as yet exist to equalize and to influence the commercial rate of interest, by acting as a conduit of money, the legal interest was in most cases far exceeded even for loans of between 5,000 and 10,000 yen. Let us also remember that at the present moment there exists no credit institution which will supply money to agriculture, and that everywhere in Japan there are complaints and disturbances raised by rural debtors. Then we shall certainly be far below the mark in estimating the *present* average interest on agricultural debts at 15%, and that would be the statutory limit for loans of between a hundred and a thousand yen. Let us remember further that in the 14th year of Meiji (1881) the mortgages on houses and land amounted to 141,000,000 yen, of which most probably $\frac{3}{5}$ or $\frac{4}{5}$ are upon agricultural land and houses; and that it can be proved that mortgage debts increased very greatly from year to year; and that it is more than 4 years since the 14th year of Meiji; we shall then estimate the present mortgage debt at least at 150,000,000 yen. If on this sum 6% is paid instead of 15% on the average, that makes a difference of 9%, equivalent to *a relief to the peasants of more than 13,500,000 yen annually*. That is about $\frac{1}{3}$ of the land tax. In former times how welcome was a diminution of land tax by $\frac{1}{5}$ or 8,000,000 yen! How joyfully it was accepted and how powerful it was to quell the agricultural disturbances in several places! And, I repeat, this great result may be obtained without expense to the State.

But this would not be the only, nor the greatest advantage for the peasantry. The chief point is that instead of a short credit, generally limited to one year, or only very few years, there will be a long credit conveniently repayable by small instalments. Here there will not be an usurious private creditor but a public bank, founded and conducted for the public welfare of all the inhabitants of the province, and to which the peasant has to give, indeed, all necessary guarantees for the security of the mortgage claim (as for instance, insurance against every sort of calamity), but which, on the other hand, is willing and able to take into consideration in undoubtedly bad years the calamities against which neither insurance nor savings will protect him, and for which he is not to be blamed. For, if the bank in the acquisition of claims on its own risk, has duly observed a reasonable credit limit, it can, in case of bad years, allow to the debtor, who has already redeemed a part of his debt, a fresh loan to the amount of this part. The bank, which is conducted in the public interest, would not dream of making an usurious profit out of the needs of the farmer.

§ 79.

The great advantages of the debtor are not at all balanced by corresponding disadvantages to the creditor. For the creditor has no right to keep the debtor continually in subjection by exorbitant interest. As soon as the creditor has got his capital, he has received his full right; unless a longer course of the loan has been an express

condition of the agreement, with exclusion of a notice on the part of the debtor. But such a condition will be seldom found in contracts of debt. The creditor obtains his rights with his full capital. In this kind of payment he gets, it is true, nothing in ready money, all in debentures. But as these are payable to bearer and negotiable in the market he can at any moment turn them into ready money. The State has no duty to support a deficient social organization in order to enable the capitalist as heretofore to burden agriculture with an excessive interest tax. The capitalist has no claims to receive a permanently high interest. If the State once did not allow itself to be deterred from paying the pensions of nobility and gentry with bonds, which, for many years after their issue, were considerably below their nominal value, and the interest of which never reached the amount of the former pensions, it will not be deterred from measures beneficial to agriculture and the whole population by the thought that if the rate of interest should again rise, these 6% mortgage bonds would possibly sink below par. Such a rise of interest is the more improbable in proportion as the Japanese social system becomes more perfect in its credit arrangements. *Soon after* the issue of these mortgage bonds for the commutation of present agricultural debts, indeed, possibly a rise of interest, or, in other words, a lowering of the market quotation, might take place as a result of many debenture holders simultaneously seeking to convert their debentures into ready

money. For abundant supply has a tendency to bring down prices. But, as before said, this would be only a transient and an unimportant affair. And even should the original creditors have to complain of losses, two answers may be made to their complaints. First, they were never assured, each and all, of recovering the whole of their debts; and secondly, they had in former times advanced the loans in depreciated paper currency, and now received it back in ready money of greater purchasing power.

§ 80.

Regarding the second and third class mortgage debentures, which, in consequence of bad debtors, would possibly receive a dividend of less than 6%, we may remark that in their case, the creditors, as a body, would share between them a loss which would otherwise have fallen upon the individual.

On the other hand, however, we may remark that, according to the above proposal, the whole body of debtors will have to suffer for non-payment of any *repayment-installments*, by a somewhat increased period of repayment of each one of them. This gives to the debenture holders a full security for the entire liquidation of the loaned capital.

The proposal is of just such a kind that it benefits neither creditor nor debtor exclusively. As far as interest is concerned, the body of creditors will suffer for bad debts, as far as redemption goes, the body of debtors will suffer. Or it might be done otherwise; in arrang-

ing the system of second and third class debentures, one might use another way of distributing the losses; as, for instance, that in every single loss, whether of interest or capital, the body of creditors should bear one half of the loss, and the body of debtors the other.



THIRD PART.

HINTS FOR PRACTICAL EXECUTION.

SUMMARY.

§ 81.

In the preceding part we have proposed a series of organically connected arrangements and institutions. These fall into four groups :

I. *Insurance :*

Crop insurance,
Cattle insurance,
Building insurance.

II. *Saving Institutions :*

Parochial Postal Savings Banks,
Rural Savings Societies,
Provincial Savings (and Land credit) Institutes.

III. *Credit Organizations :*

Provincial (Savings and) Land credit banks
with power of issuing debentures.

IV. *Liberation of the Agriculturist from his creditors with the help of Arbitration Boards :*

County Arbitration Boards,
General Provincial Commission,

Enlarged General Commission as Court of
Appeal.

Plan for Gradual Establishment.

§ 82.

First Period :

Establishment of numerous Parochial Postal Savings Banks with the Tokyo Postal Savings Bank as provisional centre.

Second Period :

Establishment by the provinces of Provincial Savings and Land Credit Banks.

Transfer of accumulated savings from the Tokyo Postal Savings Bank to these respective Provincial Banks. Loans by the latter banks on landed property against first mortgages within the first half of a moderate assessment.

The mortgager undertakes the duty of insuring crops, cattle and buildings, and of entering a Rural Savings Society as soon as the arrangements therefore have been made.

Third Period :

As soon as several Provincial Savings and Land Credit Banks are established, there follows the establishment

of the local and central debenture system. Then a central office for negotiating Central Debentures will be established.

Organization of Rural Savings Societies.

Fourth Period :

Mutual crop insurance.

One *Provincial* Insurance Association for each province, an *Imperial* Insurance Association for reinsuring the Provincial Insurance Associations. The Provincial Savings and Land Credit Institute acts as insurance agent with a representative in each county.

The Central Debenture Office also becomes the Central Insurance Office.

The land tax assessment of the land which bears the insured crops is taken as a basis for the allotment of insurance premiums.

A certain percentage of the same is taken as a limit for the highest repayments in case of total loss.

Fifth Period :

Establishment of Arbitration Boards, County Arbitration Boards, General Provincial Commission, enlarged General Commission.

Settlement between agricultural mortgager and mortgagee. Commutation by means of first and second and third class debentures, transferring claims from the individual creditor to the provincial bank.

The debtors undertake to enter the crop insurance, and, as soon as possible, the Rural Savings Society, Cattle and Buildings Insurance. If a Rural Savings Society exists already on the spot, it is to be entered at once.

County Insurance Associations will be called into existence in this or in a later period, as soon as the number of insured members permits. Each County Insurance Association receives reinsurance from the Provincial Association above it. Later, Parochial Insurance Associations will be called into life by degrees as the number of the insured increases. These will, in their turn, receive reinsurance each from the County Insurance Association above it.

Sixth Period :

Mutual Building Insurance with the same gradations will be established, and the debtors of the Credit Bank are received into it.

Seventh Period :

Mutual Cattle Insurance on the same plan is established, and the debtors of the bank join it.

Eighth Period :

Other persons are permitted to enter into one or other or all the departments :

Crop insurance,
Buildings insurance,
Cattle insurance,
Rural Savings Society.

Voluntary Entry.

Time Required.

§ 83.

I estimate the time required for establishing these institutions as follows.

Period I from about 1 to 3 months.

„	II	„		12	„
„	III	„	3	„ 6	„
„	IV	„	12	„ 24	„
„	V	„	12	„ 24	„
„	VI	„	6	„ 12	„
„	VII	„	12	„ 24	„
„	VIII	„		12	„

Or, for the whole undertaking from, 5 years and 10 months to 9 years and 9 months; or, roughly, from 6 to 10 years.



APPENDIX.

I.

DEVELOPMENTS.

CHAPTER I.

Unavoidable Compulsory Sales of over-embarrassed peasant estates and the Colonization of Hokkaido.

§ 1.

For the greater part of the distress of insolvent farmers, remedies are suggested, in the proposals contained in my book on Agricultural Insurance, by commutation of agricultural mortgages and cutting down the usuriously increased charges (by means of First Class debentures in cases where a security is given within 50% of the valuation of the land, and by Second and Third Class debentures where the security given lies between 50% and 66 $\frac{2}{3}$, or 66 $\frac{2}{3}$ and 80% of the valuation). But it is quite plain that there will be many farms which, in spite of all efforts, will be so overloaded with debt as not to produce the minimum necessary to support life, and the debts upon which come to more than the 80% allowed by Third Class debentures. It is better to file a petition for liquidation at once, than to leave the farmer to endure a hopeless, protracted process of exhaustion at the hands of the usurer. Of course the farmer himself will prefer this balancing between existence and non-existence, to a totally unknown

future without any property and without any prospect of ever again exercising his calling. So it becomes our duty to provide for these people, for whom bankruptcy was the best course, a new and suitable means of existence.

§ 2.

The Hokkaido requires for the development of its great treasures, and to secure its possession to Japan against covetous neighbours, a population, and especially an *agricultural* one.

As the Hokkaido does not get populated quickly enough by itself and, does not offer sufficient inducement for free independent immigration, care should be taken to secure *a state aided system of immigration*.

In 1883 I had the honour to submit an elaborate plan for this to Count YAMAGATA on the occasion of a paper of mine on the Land Credit Institute.

I suggested that out of every 10,000 inhabitants 5 young *farmers* should be chosen annually, just as in Germany 33 or 34 young men out of every 10,000 inhabitants are chosen annually for the army. For, I thought, a country is as well defended by spade and hoe as by sword. I pointed out how these who were picked out and sent to the Hokkaido as colonists, should be organized *on cooperative principles* into village-, county- and provincial associations; how the colonists were to be first placed as *tenants* and afterwards gradually and by regular steps converted into full *proprietors*. All these associations should

stand in connection with a Land Credit Institution, which I proposed to call, from its peculiar functions, a *Colonization Bank*. This Colonization Bank would make advances to the colonists, partly directly and partly by means of certain Association-Boards; partly in ready money, but principally in kind (tickets, implements, prepared timber, cattle, fruit trees, seed-corn, and seeds of various kinds). In return, the bank would be entitled to collect, for many years, a rent from farms which have been thus brought into cultivation. This rent should be big enough to pay interest, and gradually to redeem the whole of the advances made by the bank. These advances should not only be direct advances made to the individual colonist but, also indirect ones, consisting in his participation in those advances, which are made by the Bank to the Association of which he is a member, in order to facilitate the acquisition of necessary improvements, such as streets, bridges, ferries, schools, hospitals, etc. The money required will be procured by the bank by means of issuing Colonization Debentures. These will be in every way akin to the ordinary mortgage debentures, the annuity debentures, and the land cultivation annuity debentures: payable to bearer at a fixed rate of interest, and regularly redeemable, just in proportion as the colonization advances are paid back by the farmer-debtors. I then expressed the hope that such a well organized money aided system of colonization would attract a great number of young agricultural volunteers, so that the state would not need to have recourse to a compulsory

selection, though it has the same right to that as it has to military conscription.

I now come back to this my project of a Colonization Bank, for the very reason that there are just now numerous rural bankruptcies; and because, during the next few years, many compulsory sales of encumbered estates are to be expected.

§ 3.

In my opinion the state must not suffer this *valuable* human material to be ruined, nor allow it to be lost among the rest of the population in want and misery, nor permit it to benefit a foreign country, by emigrating to Hawaii. Not that I would forbid emigration to the latter country; but I consider that Japan has, in the Hokkaido, an excellent field for colonization, and one, moreover, *which it is in danger of losing* if prompt and effective measures for colonization be not at once taken. It is therefore to Japan's interest to make the Hokkaido an attractive field for immigration, and to do all it can to assist its distressed farmers to settle there.

In connexion with my present work, I would suggest that the "Provincial Savings and Land Credit Bank" in the Hokkaido should be established in such a modified way as to permit of its playing there the part of a "Colonization Bank" also. I am convinced that, after having for some time observed the great services which such a bank might render, in settling broken down peasants and their families, the courage and energy

requisite for the greater plan of the systematic colonization of the Hokkaido will not long be wanting.

§ 4.

Also I would point out the great prospect of wealth which such a scheme offers to the great landowners in the Hokkaido. Now their big estates are almost without value. Let us suppose a landowner, aided by the Colonization Bank, settles a colony of tenant farmers on one tenth of his land. Let us further suppose that he as well gives as procures for them such easy terms that the tenants come into possession of the land without paying him *anything*, as soon as they have repaid the interest and capital loaned to them by the bank. Even so his gains would be enormous. Would not the remaining $\frac{9}{10}$ of his hitherto valueless land, which would now be in the neighbourhood of one or more villages, at once receive a considerable value? Would not the Hokkaido afford an excellent opportunity for obtaining State Lands for the Government, Crown Lands for the Imperial House; and for the high nobility those big estates which are necessary for it, if it is to take the same important place in the Japanese body politic as is borne in Prussia and England by the Prussian and English aristocracies?

I should wish strongly to advise the large landowners and capitalists to found colonies, not for the purpose of making a profit by means of rents so much as of raising the value of the land adjacent to the colony. Let the

capitalist leave all advances, &c., to the Colonization Bank, which in return draws all the rents; then let him buy from the bank a certain number of Colonization Debentures. Let the bank place on the land which he entrusts to it for this purpose a number of tenants corresponding to the number of colonization debentures which he has bought. For example: A capitalist invests 20,000 yen in the Hokkaido. He buys a considerable tract of land for 2000 yen, and Colonization Bonds for 18,000 yen. The bank, having received $\frac{1}{10}$ of the land for its own property, promises him to hand over $5 \times 18,000$ yen = 90,000 yen, as advances to an Agricultural Colonization Association on this land, organized by herself. If the credit required for one peasant family is 300 yen, 300 such families can be settled for such a sum. This would mean about six villages on this piece of land. Instead of rents, the capitalist enjoys the interest of the Colonization Bonds, and the increased value of the remaining $\frac{9}{10}$ of his land, which is now near and amongst villages, and consequently becomes workable, rentable, and saleable. For this he only invested $\frac{1}{10}$ of his land which he bought for 2000 yen, i.e. 200 yen. The Colonization Bank obtains $\frac{1}{5}$ of its capital from the landowners concerned, the rest from the general public by the sale of Colonization Bonds. In any case the capitalist obtains a greater profit than he could have done by isolated investments of his own capital. Moreover, thanks to the bank, he has less trouble in management; and,—thanks to the Colonists Cooperative Associations—less risk.

§ 5.

If, in the rest of the country, crop, cattle, and buildings insurance have been established, and the new and old colonies in Hokkaido can join them, then at one blow the colonists, the companies, and the colonization debenture holders, one and all get a greater amount of security. Greater security means easier and cheaper credit; cheaper credit means fewer charges on the colonists. So the foundation of the insurance associations will bring a benefit to the development of the Hokkaido also.

CHAPTER II.

The Commutation of a part of the Lease-rents, by means of Arbitration boards and the Provincial Savings and Land Credit Institute.

§ 6.

A great portion of the agricultural indebtedness in Japan is the result of rent arrangements.

Rent contracts in Japan are of various kinds, and differ not only according to provinces, but even from village to village. Nevertheless they have the following points somewhat in common :

1. Rent contracts for a long period are very rare, and only occur in the case of newly cultivated farms, and when the tenant has lent money to the landlord. Contracts for from five to ten years are rare, those for twenty years only occur in a few districts; in the majority of the cases they are for three or five, or even fewer years, sometimes without any fixed period.
2. Although in almost all districts it is customary that in bad years, or after some great accident, the landlord makes a reduction of rents; yet it is very seldom that provision and promise is made for this in the contracts. The tenant depends, in this matter, entirely on the goodwill

of the landlord. Yet the rent is generally based on the crops in good years. Where it is based on the crops in bad years, and is consequently somewhat too low, it is generally expressly stated in the contracts that no reduction will be made in bad years. This is, however, seldom the case.

3. As soon as the tenant is in arrears with his rent the landlord may evict him and take back the land. In such a case the latter takes all the standing crops as a matter of course. But in some counties he makes an allowance for the cost of manure. But in a great number of cases the landlord retains the right to evict the tenant whenever he wishes, and also custom, even, eventually allows him to do so when he as landlord wishes to use the land himself. But yet this right is seldom put into force by the landlords, partly because they are somewhat bound by custom, and partly because they mostly shrink from the inconvenience.
4. Compensation is never made for improvements done by the tenant; consequently they are mostly left undone.
5. Rents are high; generally as high as the circumstances will permit. Fruitful and easily worked land gets, of course, higher rents than land which is less fertile and less easy to be worked: If the tenant was himself formerly the owner of the

land, the rents are sometimes a little less unfavourable. If the contract is favourable to the tenant, it is a right which is worth money and is then sometimes sold to another tenant successor for ten, fifty or sixty *yen* per 'tan.' If the tenant pays beforehand the rent of one or more years, as a caution money, the contract is generally in his favour; but if the tenant has mortgaged his land to his creditor, and if the land has already passed into the hands of the creditor, with the stipulation that it shall not revert to its former possessor till the whole debt has been paid, the contract is generally especially unfavourable. In this case the former possessor cultivates the lands, and pays rent as well as interest on his debt.

We may estimate that in 95% or even more of all the cases, at the time of making the contract, the tenant is the weaker; and the landlord the stronger. The *stronger drains the weaker*. The farmer must have land in order to exercise his profession, or must become a servant to another. If he belongs to an agricultural labourers' or tenant farmers' family, or if he was himself formerly a landowner who has lost his property, and has not enough money to *buy* a piece of land big enough for himself, he will, in order to avoid becoming a servant, seek to become a tenant; but tenants then always wish to become the owners of the farms.

§ 7.

In the period of Meiji the condition of the farmer seems to have become generally worse. This we can see especially in the fact that the farmers in different counties have become restless, and formed associations for obtaining from the landlords a reduction of rents. The disturbances caused by these agitations are a very ill-omened symptom. The farmers are now further than ever from the object of their hopes and endeavours to become free and independent owners of a sufficient piece of land. This is fraught with injury to the people, nay, fraught with injury to the empire of Japan.

In July 1873 (6th year of Meiji), a series of laws on the Land tax were published. In Art. 15 of "Directions for the agents of the Land-tax Assessment" we find as follows:—

"If the proprietor cultivates his own land, he makes the most strenuous exertions to improve the crops, but in case of leasehold tenure the tenant generally cares less for the improvement of the soil, and the crops are consequently diminished. Therefore, if 6% be the normal rate of interest when the landlord farms his own land, it may with justice be reduced to 4% where a tenant farms the land. Persons whose duty it is to assess the rateable value of property, must bear this distinction in mind."

Hence, when land is rented, it loses $\frac{1}{3}$ of the net produce which it would otherwise gain. What a loss

for Japan! And that at the very time when the state requires all possible forces and resources in order to increase its army and navy, to maintain its political position among the nations, and so effectively to defend every part of its territory that no covetous neighbour shall ever dare to stretch out his hands against it.

§ 8.

In § 20 of my treatise on “the first Japanese Land Credit Institute,” I referred to this question as follows:

“Here also an institution for long credit may be very beneficial. It mediates the sale of the soil to the tenant. The owner will often be very willing to sell the land; the money so received enables him to put tenants upon new land, to enhance the value of his hitherto valueless estate, and so to get large profits. The former tenant, having become the owner, will not be wanting in care, expenditure, or labour, as he is now sure of obtaining for himself the whole profit arising from his land. Hence the property in his hands will speedily rise in value (50% on its *former* value according to the estimate given in Art. 15), the profit will be greater, and it will be easy for the farmer to repay to the bank by yearly instalments the interest and capital of the loan made to him, which enabled him to recoup the former owner and to become himself the owner of the land.”

§ 9.

An improvement in the condition of the tenant farmer can, I take it, be expected not only from increased facilities for insurance, but also from more convenient opportunities for investing savings. Agricultural insurance in all its branches will deliver the tenant in future from the need of appealing to his landlord's forbearance in years of great loss. Also the increased facilities for saving will strengthen the position of the tenant and secure his independence. As soon as the Hokkaido Colonization Banks have been established, and a stream of immigrants, at first as tenants, who become afterwards proprietors, has begun to set in towards that province, a back wave of most beneficial influence will be felt in the other provinces. For whereas at present the farmer without capital is obliged, through want of land and want of facilities for borrowing capital on easy terms, to support himself and his family by occupying already cultivated land, he will now have the hope of turning his back on Japan proper, and, in the Hokkaido, of occupying fresh land, which will gradually even become his own property. And whereas the competition among tenants now enables landlords to make their own terms, and always to keep increasing the amount of rent, then, in order to retain their own tenants and to get fresh ones, there will be a competition among the landlords, which will enable tenants to obtain terms favourable to themselves. Then the tenant will be able to obtain, by contract, long leases

on moderate terms, with judicial provision of a valuation for reductions in bad seasons, and payment on unexhausted improvements. It will then be impossible for the landlord to break the lease at his own will, without notice. The landlord class will no longer stand in the position of land-monopolists, *vis-a-vis* the farmer, to whom this land is in all circumstances indispensable; because the agricultural population will have, in the Hokkaido, a means of escape from too great oppression. On the other hand, the general disinclination amongst the Japanese against emigration to Hokkaido, the sluggishness of the peasant class and the tenacity with which they cling to the old and avoid the new, will always be a guarantee that the landlord in Japan will never be without a tenant and the soil never be without a cultivator.

§ 10.

But *this* improvement of lease conditions cannot come about immediately, as it presupposes the *widely active* operations of agricultural insurance, and of Provincial Savings and Land Credit Institutes, as well as of the Colonization Banks. The mere existence and establishment of these institutions is not sufficient; they must have the full activity and energy which they can only obtain after several years of operation. The Colonization Banks, moreover, being a *more complicated* form of Provincial Banks, cannot be established till after the

Provincial Banks have been firmly set on foot. There must consequently be a lapse of some years before the Colonization Banks can come into active existence.

Now, though a more speedy means of ameliorating the condition of the tenant farmer is eminently desirable, to influence the system of tenures is, all the same a most difficult and delicate problem for the legislator. For instance, however desirable it may be that leases should be drawn out for long periods, it would be impossible simply to issue a decree that leases should always be for long periods; for circumstances often make short leases desirable and advantageous for *both* parties. For instance, a tenant does not wish to take, on a long lease, land of the qualities of which he is entirely ignorant. He mistrusts his own opinion, formed simply by one or two inspections, and would wish to have the benefit of experience before incurring a responsibility, perhaps too heavy, of *several* years' duration. On the other hand, the landlord may well hesitate before he entrusts his land for a long period to a tenant whom he does not know, and who may perhaps exhaust the land by misuse. With a short lease, or notice at will, self-protection is more in his power; for under such circumstances the tenant is more careful of his land, for fear of receiving notice to quit.

This is not the place to describe at length the difficulties of lease legislation, with its manifold regards to conflicting interests and points of view. But *one part*, at least, of the whole number of farmers, may see their

condition sooner ameliorated by having recourse to the before-mentioned system of arbitration.

§ 11.

I propose to give to the arbitrators, with the Provincial Savings and Land Credit Banks as their assistants, authority to arbitrate in *some* cases between landlord and tenant.

1. They may help in a *mutual agreement* between landlord and tenant, by recouping the landlord for the giving up of his land in mortgage debentures, and by transforming the tenant into a landowner, while mortgaging the soil in question to the Provincial Savings Bank as his creditor.
2. If the above-named authorities are permitted to interfere on the appeal of the tenant alone, this decidedly would be an infringement of landlord's rights. To be sure, he would receive a recoupment in mortgage debentures, but he would receive them without his consent, and against his will. He is forcibly "expropriated" and evicted. But such expropriation does take place when the public interest requires it, as in the construction of railways, fortifications, and government offices; and in the protection of the peasant in his property and in the preservation of a vigorous, prosperous, and contented peasantry an important public interest is at stake. In consequence of

the great social revolution since the commencement of Japan's modern era, and in consequence of the changes in Land Tax Legislation, the existence of the Japanese peasantry is seriously threatened; the process of disintegration has already commenced, and it is to the public interest to oppose this disintegration as much as possible. As an efficient means thereto it seems to me that the arbitrators might be permitted on the *one-sided* appeal of the tenant alone to assign mortgage debentures in lieu of his land to the landlord,

- (a.) wherever the tenant was formerly the landowner, and the landlord his creditor; or
- (b.) wherever, in spite of local customs and usages, the landlord had granted no relief or reduction to the tenant in times of calamity or of bad seasons.

§ 12.

In the proposal I made above for arbitration in Japan between mortgage-debtors and mortgage-creditors, I pointed to the fact, that in Germany the emancipation of the soil (or in other words the liberation of the peasantry from their oppressive burdens) was something different; and now I must make the same remark with respect to the arbitration between tenants and landlords, which I have just proposed. Only the chief idea is the same: in both countries there are heavy burdens on the

peasantry, which represent rights which have a money value for the landlord, and from which the tenant is to be freed without injustice to the landlord.

In order to make this point quite clear, I will extract from a paper on the Land Annuity Bank in the Kingdom of Saxony, and name some of the burdens from which the Saxony peasantry were relieved by arbitration, with the help of the bank.

- I. Burdens, akin to the former villeinage, which sprang from manorial relationships.
- II. Services, which, independently of manorial relationships, sprang from reciprocal services between different owners of certain classes of estates.

To the first group belong :

- a. Those services on behalf of the lord of the manor, known as compulsory service (socage,) and which consisted in hand and yoke service, for cultivating the land of the lord of the manor and in services for keeping in order and repairing the buildings belonging to the same.
- b. The restrictions of the free movement of the tenant with reference to the lord, and the lord's necessary consent to marriages contracted between tenants on different estates.
- c. The right of the lord to expropriation and pre-emption.
- d. The right of inheritance of the lord, with regard to a part of the inventory of the service-liaible land, after the death of the peasant possessor (heriot).

- e. The compulsory ban-rights of the lord, (e.g. smithy privileges), by which the tenants were bound to the exclusive use of certain profitable undertakings belonging to the said lord, or the obtaining of certain products exclusively from him (e. g. malt, beer, wine).
- f. Different services in money and in kind, partly at determined intervals (as tithes in kind, and money rents) ; partly fees on change of possessions or other occurrences.

To Group II belong :—

All rights of pasturage, as well as the right to get wood, litter, resin, rushes, and turf from other peoples land, and the right of using sand, clay pits, and stone quarries belonging to others.

It can be seen by this that the arbitration in Saxony was a much more complicated matter than it would be here. It comprised there, besides the copyhold rights and hereditary rights, every possible kind of compulsory service (socage), besides many private arrangements, and the most varied kinds of obligations. The object most to be desired is, here as there, that the farmer should be able to use, freely and independently, all his power and means for the cultivation of *his own* land. And that it will be here an easier matter than there, can be no objection to the work of relief and commutation. Here, as there, we reckon it one of the principal sources of national wealth to protect agriculture, and enable it to attain its highest stage of development.

Saxony first invented, in the Land Annuity Bank, a means for obtaining the requisite commutation-capital without crippling the means of the persons under obligation or the resources of the state.

The German Annuity Banks, as I have remarked in my paper on Land credit, act as mediators between landlords and peasants. They advance capital to the landlord, but in debentures, not in ready money, and these debentures may be sold by the landlord. From the peasant they draw interest and gradual repayment of the capital, and the liberated soil mortgaged becomes a security for punctual repayment. They pay to the landowner, or rather to the purchaser or possessor of the debentures, all the interest, and gradually pay off the debentures in proportion as they receive back instalments of the capital loaned to the farmer.

The majority of Annuity Banks were established by the state in order to secure to the farmer the most favourable conditions, and by itself foregoing all prospects of profit. The famous economist ROSCHER expressed the following opinion: "It is difficult for the state to obtain greater benefits for smaller sacrifices than by taking over and guaranteeing such Commutation-Loan Institutes."*

The advantage of this method is ever becoming more and more conspicuous. It has been adopted

*) Wilhelm Roscher. System of Political Economy. Vol II, Political Economics of Agriculture and of the related raw-productions 2th ed. Stuttgart, 1867. §. 123.

successively in the legislation of some twenty smaller and greater states.

On the occasion of the Jubilee of the Saxon Land Annuity Bank, a Jubilee paper was published giving the names of the various German states which had followed the example of Saxony, with the dates at which they adopted these measures.

1. Kingdom of Saxony 1832.
2. Former Electorate of Hesse 1832.
3. Grandduchy of Baden 1833.
4. Duchy of Brunswick..... 1834.
5. Grandduchy of Hesse 1836.
6. Duchy of Sachsen Altenburg 1837.
7. Former Duchy of Nassau 1840.
8. Former Kingdom of Hannover 1840.
9. Kingdom of Württemberg..... 1848.
10. Kingdom of Bavaria 1848.
11. Duchy of Anhalt Dessau and Köthen 1848.
12. Duchy of Sachsen Meiningen 1849.
13. Kingdom of Prussia 1850.
14. Principality of Sachwarzburg Sondershausen 1850.
15. Empire of Austria 1850.
16. Duchy of Sachsen Coburg Gotha ... 1850 and 1853.
17. Former Landgravate of Hesse Homburg 1852.
18. Grandduchy of Sachsen Weimar 1853.
19. Principality of Reuss (junior line) 1854.
20. Principality of Waldeck 1854.
21. Principality of Schwarzburg Rudolstadt 1855.
22. Principality of Reuss (senior line) ... 1856 and 1873.

If, as we have seen above, the Annuity Banks in Germany served for purposes akin to though not identical with, those for which such Japanese Banks would be used, a short notice would give us a clearer notion of their working and of the possibilities of their operations here. I take as my example the Land Annuity Bank in the Kingdom of Saxony according to the paper bearing the same title.

This bank undertakes to collect the commutation annuities from the persons under obligation down to a minimum amount of 4 *Pfennige* or 1 *Sen*.

The Special Commissions and the Superior General Commission for Commutations and Separations were entrusted with the finding of the amounts of the annuities and with the carrying out of the processes of commutation. In order on the one hand to make the system of commutation by debentures as widely applicable as possible, even to very small amounts, and on the other hand to limit the clerical work required in the issuing of the debentures as far as possible, six classes of Land Annuity Debentures were created :

Letter	A.	of	3,000	Marks	Capital.
„	B.	„	1,500	„	„
„	C.	„	300	„	„
„	D.	„	150	„	„
„	E.	„	75	„	„
„	F.	„	37½	„	„

Hence the sums represented by the various classes of debentures varied from 750 to about 10 yen.

The Land Annuities were entered as security for the bank in former times in the "purchase and sale register" and only in the later times in the mortgage register. This example shows that it was possible in Saxony to put the bank on a secure basis even before the last improvements of the mortgage law took place.

The Land Annuity Debentures received, with regard to their collection and their rank at subhastations, a similar position to the land taxes. The collection of them is entrusted to the office of the administration of direct taxes. The mortgage claim of the Land Annuity Bank always comprises all the pieces of land belonging to one and the same continuous estate. If certain parts of such an estate are separated from it, such parts must pay a contribution to the original estate; if these are further disintegrated they must contribute to the first contribution. The Land Annuity Bank has, however, nothing to do directly with these contributions; the assessment of them is the business of the Administration of the Land tax.

The Land Annuity Bank did not, however, by taking in the land annuities, and by granting corresponding annuity debentures, come into direct contact with the owners concerned; but it was rather the afore-named "General Commission for Commutations and Separations" which had to settle definitely the amounts of the annuities and of the commutation-capitals, and had to arrange

the transfer of the latter with the co-operation of the land and mortgage register authorities.

With regard to the importance of the Land Annuity Bank, there have been 454,716 land annuities committed to it in Saxony alone, in capital amounting to 85,688,465 *marks* or about 21,400,000 silver *yen*.

The average commutation capital amounted therefore to only about 47 silver *yen*. A smaller average will hardly be obtained even in the case of the Japanese miniature farms where often a tenant with his family only cultivates about 3 *Tan*.*

The kingdom of Saxony is only a small country with about $\frac{1}{13}$ of the population of Japan, and yet nearly half a million of peasant families were benefited by the work of commutation. To give an idea of the grandeur and extent of this measure in Germany, I may say that the debentures given to landowners by the Annuity Bank consisted, in Hannover, of a capital of 26 million silver *yen*, and in Austria of 150 million, apart from the other German states mentioned before.

I will add the statistics for the last few years, at least on the extent of the commutation work in Prussia, which was begun in 1811, and which, after having been regulated anew in 1850, has continued until now, basing them on the "Report of the Minister of Agriculture, Domains and Forests, to His Majesty, on the Agricultural Administration in the years 1881, 1882, 1883."

* 1 *Tan* = $\frac{1}{4}$ of one acre.

In the twelve years embraced from 1872 to 1883 inclusive, 826,172 persons under obligation commuted, each commutation on the average with a compensation of 26 silver *yen* 30 *sen* capital, 2 silver *yen* 40 *sen* money-annuity, and 1 *sho* 3 *go* annuity in rye, as the following tables show.

Business year.	Number of persons owing Service and Contributions who have commuted.	Compensations :		
		Capital. Mark.	Interest. Mark.	Rye. Neuscheffel at 50 Liters.
1872	22,398	5,005,848	64,323	4,284
1873	39,074	9,718,908	222,813	2,348
1874	63,106	23,808,135	515,772	1,930
1875	77,721	23,715,967	431,058	2,864
1876	75,092	4,533,374	1,362,570	4,346
1877	72,042	3,407,565	962,703	8,644
1878	61,543	2,876,032	708,789	3,978
1879	72,144	3,488,269	655,485	4,701
1880	74,132	2,646,560	720,738	3,371
1881	77,897	2,436,631	693,776	1,486
1882	92,751	2,777,060	833,906	967
1883	98,272	2,551,698	792,639	865
826,172 or average for one such person.		86,966,047 105,2 Mark.	7,964,572 9,6 Mark.	39,784 2,4 Liter.

A glance at this magnificent *paternal* activity and care of the German states, for the *small peasant*, should encourage Japan to undertake, if not exactly the same, at least a similar work.

CHAPTER III.

The Land Cultivation Annuity Bank.

§ 13.

Whereas all the institutions hitherto mentioned in the previous pages on Agricultural Insurance have been intended for the *one sole* great purpose of removing *present* adverse circumstances, which oppress the peasantry, the establishment of a Land Cultivation Annuity Bank (Landesculturrentenbank) is intended for the *improvement* and *development* of agriculture. Thus Insurance of crops, cattle, and buildings, Parochial Savings Banks, Rural Savings Societies, Provincial Savings and Land Credit Banks, working in connexion with the Arbitration Boards, for commutation of the mortgage debts and of a part of the lease rents, all tend to emancipate the farmer from bloodsucking usury or to secure him against those accidents which have hitherto driven him into the hands of the usurer; but a Land Cultivation Annuity Bank will make advances on easy terms to the farmer *for the special purpose of improving the cultivation of the soil.*

We must make a sick man well before we try to develop his physical strength by gymnastic exercises; so we must first cure the *ailments* of Japanese agriculture before we take the further step of developing its force for fresh undertakings.

This is such a natural course, that wherever we find

Land Cultivation Annuity Banks, we find them as the last development of the Agricultural Credit-System. For instance, *Saxony* was (1832) the first state to establish a Mortgage Debenture Bank, "Annuity Bank," for relieving the agriculturists of their burdens by means of *commutations*, it was also the first State (1861) to establish a Land Cultivation Annuity Bank for purposes of agricultural *ameliorations*. *Prussia*, which in 1850 adopted a system of provincial banks for the first purpose, was in 1879 able to sanction the establishment by the Provinces of banks for Agricultural improvements. The Grand duchies of Hesse and Oldenburg have recently followed these examples: *Hesse*, Land Annuity Bank 1836, Land Cultivation Annuity Bank 1880; and *Oldenburg* in 1883 officially established in connection with its Home office an institution for the double purpose of making loans on real estates and of making advances on mortgage securities for Draining, Irrigation, road-making, planting of forests and bringing new land into cultivation &c;—these loans being repayable by instalments. *Bavaria*, which by the law of 4. June, 1848, had effected the emancipation of the land with the aid of a Commutation Bank, established in 1884 a Land Cultivation Annuity Bank for making advances of capital for the following purposes:—

1. Irrigation and Drainage.
2. Regulation of brooks and private streams, and for the protection of riverbanks and dams.*)

*) In the Prussian legislation, reservoirs, river navigation appliances and floating channels are also included here as mortgageable objects.

3. Rearrangement of parcels of land.
4. Breaking up of barren lands and improvements of fields and meadows.
5. Making of roads calculated to improve agricultural property.
6. Afforestation of common waste lands.

As we see, the Land Cultivation Annuity Banks belong to the most recent time; they are the last grade of the development, the final goal which can only be reached after long preparation. Is that a reason for not mentioning them here?—Nay, I believe the enumeration of the above-mentioned tasks of such a Bank will make it quite clear that a Bank of a similar kind is what Japan requires and the consciousness that the other institutions (Insurance, Arbitration, &c) are the necessary steps towards this end, will strengthen the determination to overcome all those obstacles and difficulties which might rise up in the way of the preliminary steps.

§ 14.

Even after the above-named preliminary steps have been taken, we cannot consider an agricultural cultivation Bank as a matter of speedy establishment in Japan, until the country possess a considerable number of trustworthy farming-engineers. Farming engineers who can reach the high scientific attainments required from them in

Germany,*) are entirely or almost entirely non-existent in Japan. But these are not absolutely necessary if there be only a sufficient number of Farming Engineers such as must have hitherto been used in Japanese agriculture, who are practically able to study the soil, to decide on those localities where drainage and irrigation may profitably be employed, to give the necessary suggestions to the parties concerned, to prepare plans and estimates, to be helpful at the meetings of the district authorities, to give to the parties concerned the necessary explanations of the project, to assist in assessing the various quotas in cases of associated undertakings, and finally

*) Farming Engineers (*Cultur-Ingenieure*) in Bavaria must first obtain a certificate of general proficiency from some *Real-Gymnasium*, *Oberrealschule* or *Gymnasium*; and then spend three years at the Technical High School in Munich.

Here the course is as follows.

- 1st. year. Higher mathematics, general botany, agricultural chemistry, nutritive system of Plants, geognosy, science of reclamation and irrigation, linear drawing.
- and. year. Technical mechanics and graphic statics, engineering architecture, practical geometry, general principles of earthworks and roadmaking, treatment of pasture land, topographical drawing and surveying.
- 3rd. year. Higher geodesy, principles of water-works, special road-making, general principles of machinery, estimates for engineering works, Bavarian constitutional and administrative law.

This course is somewhat modified for those who have been through a *Gymnasium*.

After successfully passing this theoretical course, they must go through a practical course as apprentices and afterwards as assistants to the District Engineers.

(Comp. "The Organization of the Agricultural Engineering Service in Bavaria," pp. 65-84 of H. Haag's "Commentary on the Bavarian Law on the Land Cultivation Annuity Institute." Noerdlingen. 1884.)

to carry out the projects and to see to the maintenance of the Agricultural Amelioration Works.

If Japan possesses these technical forces the Provincial Land Credit Banks and Arbitration Boards will very soon find them out and make practical proof of them in arbitration cases and in obtaining their opinions on agricultural problems. It is impossible to advance money for non-existent projects before there is at hand such a technical staff, whose verdicts may be entirely relied on. It is beyond all question easier to pass an opinion on something ready to hand, than upon something [not yet in existence; it is far easier to make advances upon agricultural undertakings already in progress, than it is rightly to estimate beforehand the costs and probable results of new undertakings.

§ 15.

It is not only a necessary preliminary to Agricultural Cultivation Credit that the already mentioned authorities and institutions should possess this technical staff, but these authorities and institutions are themselves organs, which must cooperate in the carrying out of Agricultural Cultivation Loans.

The Cultivation Annuity Bank is so entirely a sister institution to the Land Mortgage Debenture Bank, that in Saxony it depends entirely upon it, even making use of the General Commission for Commutations. Thus the Cultivation Annuity Bank does not come into direct

contact with the parties concerned in the advancing of loans ; rather, at the request of the Debenture Bank, the General Commission for Commutations (now a special department of the Dresden County Government), acts, in the examination of amelioration plans for agricultural drainage and irrigation as an intermediary between the Cultivation Bank and the concerned party. In Prussia the arbitration boards are also concerned, though in a more limited degree, whenever there is a question of giving a priority to a new drainage loan over an already existing mortgage. In Oldenburg the sanction for a loan is given by the Direction of the Credit Foncier, attached to the Home Department, upon the request of the district authorities.

§ 16.

So far as I know there is not yet any statistical statement of the amount of amelioration work done in Japan. We do not yet know how many villages and associations of villages in the past have undertaken drainage and irrigation works, nor how many other associations of landowners have been formed for this purpose. Neither have we any information about the number of members, the number of plots of land, and their area ; nor yet about the cost of such undertakings.

In Bavaria, in the year 1870, a statistical investigation of the agricultural improvements made from 1853 to 1870 was undertaken. The results of this investigation

are published in No. 24 of "*Contributions to the Statistics of the kingdom of Bavaria.*" The period embraced ends fourteen years before the establishment of the Cultivation Annuity Bank; it is consequently a report on improvements undertaken without its aid.

Agricultural Improvements in Bavaria, 1853-1870.

I. <i>Co-operative Irrigation and Draining Associations</i>	321.
Members	13,094.
Of these, members by compulsion	61.
Number of ground-plots	27,643.
Area " " Hectares*	31,893.
Indirectly benefited land	23,531.
Costs Silver yen	202,954.
II. <i>Other Irrigation and Draining Operations.</i>	
Area Hectares	3,156.
Costs S.-yen	57,150.
III. <i>Drainage.</i>	
Number of undertakings	1,695.
Area Hectares	7,785.
Costs S.-yen	271,164.
IV. <i>Rearrangements of lots (Arrondirungen).</i>	
Undertakings	834.
Proprietors	4,525.
Number of lots.....	32,002.
Number of lots after amalgamation	10,880.
Total Area.....Hectares	12,706.

*) A hectare = 1 Cho, or, more accurately = 1'0083 Cho.

Hence Average Expenditure in Bavaria from 1853-1870.

- I. For 1 cooperative draining or irrigation enterprise only 632 yen.
 Per individual member of do „ 15½ yen.
 Expense per hectare..... „ 6½ yen.
- II. Other irrigation and drainage operations
 expense per hectare.....only 18 yen.
- III. For 1 drainage undertaking „ 160 yen.
 Expense per hectare for drainage..... „ 35 yen.

In *Baden*, also without the help of the Cultivation Bank, there was from 1870-1877 a yearly average of 61 undertakings, on an area of 694 hectares at a cost of 49,139 yen. This gives an expenditure of 806 yen for one undertaking, or 74 yen per hectare. The rearrangements of plots cost about 6¼ yen per hectare.

In *Saxony** the average cost per hectare for the period from 1862 to 1879 was:

Irrigation	203 silver yen.
Drainage.....	73 „ „
Capital employed for one drainage or irrigation undertaking	1078 „ „

Up to 31 Dec. 1883, the Saxon Cultivation Annuity Bank had laid out in loans on improvements, &c., 2,324, 145 yen in 22 years. According to the already mentioned Jubilee Document (p. 52), these were distributed as follows:

196,048 yen upon 48 cooperative undertakings for improving watercourses,—average-cost for one 4084 S. yen.

*) Von Langsdorff "Die Landwirtschaft im Königreiche Sachsen."
 p. 67.

1,706,424 yen on 1192 agricultural irrigation and drainage works,—average cost for one 1432 S. yen.
421,673 yen upon 74 local drainage and roadmaking undertakings,—average-cost for one 5,698 S. yen.

From these three instances we see two things clearly. First, that though there are some large undertakings, by far the greater part are small ones, and that consequently to deal with them satisfactorily in such a large country as Japan entails a *provincially* arranged loan-system. Secondly, that in a country where agriculture has long been carried on, new occupations and improvements are comparatively inconsiderable. For instance in Saxony, of the improvements carried out in 22 years, the draining operations altogether only amounted to 1·30% of the total cultivated area, and the irrigations only to 0·51% of the total pasture-land area. In Bavaria, in the 17 years from 1853 to 1880 the agricultural improvements embraced an area of 79,071 hectares out of a total area of 3,070,378 hectares of arable and garden land, or 2,57% of the total. In Japan, which possesses a system of agriculture, which during the two and a half centuries of the Tokugawa rule was purposely retarded and kept at a standstill, the attempts at extension and improvement will be far greater if we may judge from its rapid development under the present government. All the same, in Japan also, simple mortgage loans on real estates, especially if the system is changed to cheap, long, irrevocable mortgage debenture credit, will far exceed in amount

the loans made for new undertakings. *The introduction of a credit foncier using mortgage debentures is consequently, in my opinion, not only first in time but also first in importance.*

§ 17.

The Cultivation Annuity Bank obtains its capital by the issue of cultivation annuity debentures. These are either simply handed over in kind to the agricultural improver, who may sell them to raise money or they are brought by the bank itself into the market, in which case the borrower gets the loan in cash.

For the loan the improver owes to the bank the cultivation annuity. By means of it the bank effects the payment of interest and the amortisation of capital on the debentures issued. Hence the methods of the cultivation bank are the same as those of the land mortgage bank and land annuity bank, both issuing debentures. In Saxony, by entrusting the land annuity bank with the business of the cultivation bank, it was found possible to meet the whole management expenses of the cultivation bank with a *yearly sum of about 5500 yen**—a very small sum indeed for so great a benefit.

*) Die Landescultur-Rentenbank im Königreiche Sachsen, Denkschrift für die Gewerbe- und Industrie-Ausstellung zu Halle 1881. Auf Anordnung des Kön. Finanzministeriums herausgegeben von der Landescultur-Rentenbank-Verwaltung. Dresden 1881. S. 14.

§ 18.

*If the cultivation loans are made upon other security-conditions than the mortgage loans, it will be necessary to make a distinction between mortgage debentures and cultivation annuity debentures. Such differences are, for instance, as follows; if *only* arable land is taken as security for mortgage loans, but both arable and forest land, etc., may be given as security for cultivation loans. Or, if in the first case the mortgage must be confined within the first half of the value of the piece of land, but in the case of the improvement loan within the first half of a fictitious value embracing already the additional value for the intended improvement, the latter amount to be obtained by a special valuation; or, the improvement mortgage may be allowed within $\frac{3}{4}$ of that value which is obtained through the bank assessment of the property in its present condition only. Another difference is that in the case of the land mortgage debenture bank there are always the mortgages acquired exactly corresponding in amount to the mortgage debentures or in higher amount as the latter, whereas in the cultivation-loans given:—*

1. to Municipalities, or local authorities;
2. to such Water Companies, and Dyke-Companies as are recognized by law;
3. to Forestry Companies, with the same limitation, the loan is not to be secured by mortgages and the requisite capital is nevertheless raised by the issue of cultivation annuity debentures.

Only in case the Province becomes responsible for the punctual payment of interest and capital, just as it does for the mortgage debentures, would it be permissible to have one description of bonds instead of two. In this case the final and equal guarantee of the Province would for the creditors equalize the difference in the security.

§ 19.

In speaking of the convenience of having a Land Cultivation Annuity Bank established by the Province, I did not contemplate the erection of an independent institution of this kind. But I meant that the Provincial Savings and Land Credit Bank should take over a certain class of business transactions such as the making estimates of the probable increased value of the improved estates, estimates of improvement-expenses, supervision over the appropriation of the improvement loan, and over the keeping in repair of already existing amelioration works such as dykes, drains, reservoirs, &c. The mention of loans made by the Cultivation Bank to corporations brings us to the following chapter.

CHAPTER IV.

The Provincial Savings and Land Credit Institutes and Communal Bonds.

§ 20.

In § 42 of the previous work on "Agricultural Insurance" we saw that the money circulation of Japan still labours under the defect that the money is more and more drawn away from the Provinces to the capital. Consequences of this: a reduction in the price of agricultural products at the place of production, increased difficulties in meeting the Money Land Tax, higher rates of interest on loans in the provinces. To remedy this we recommended then the institution of facilities for accumulation of savings which would *leave* the money in the provinces (Provincial Savings Banks and Land Credit Institutions in connexion with Parochial Postal Savings Banks and Rural Savings Societies). Now I recommend, as a remedy for the same evil, an institution which will *draw* the money into the provinces; namely, the rational organization of the provincial finances, especially in relation to borrowing powers.

It is, I conceive, the duty of the Japanese statesman to encourage the provinces to undertake those greater provincial enterprises, which are of a *productive* nature, and which on account of their durability are equally serviceable to future generations as to the present inhabitants (e.g. embankments,

harbours, breakwaters, canals, aqueducts with durable pipes, tunnels, railways, stone roads and bridges which can withstand the force of the elements, &c. &c); and in doing so, *not* only to spend the present actual income (for so the present inhabitants and especially the farmers are *overburdened*), but by means of loans for these purposes, repayable by yearly instalments during a long period, to transfer a portion of these burdens to succeeding generations; for they will also have a share in the benefits of the works. And secondly they should be induced to obtain these loans at the largest money market, i. e. the metropolitan exchange, so as to bring back to the provinces the money which has to an excessive degree flowed in to the capital. The means for doing this will be found in Communal Bonds.

§ 21.

By Communal Bonds we mean obligations issued by Credit - Institutions, by means of which the latter seek to obtain from the public capital for loans to be made to Provinces, Counties, Towns and Villages, as far as they possess the right of taxation; this taxation right forming the security for the loan and for the bonds issued in connexion with it. They are bonds made payable to bearer, at fixed rates of interest, and the Credit Institute gradually pays them off at the same rates as the repayments are made to it by the public self-governing bodies. The methods there-

fore of repayment are exactly the same as those pursued in the case of mortgage-debentures, annuity debentures, colonization-debentures and cultivation debentures. This is the reason why we generally find the issue of Communal Bonds, sanctioned by the State, undertaken only by institutions which pursue these methods. Thus we find in Germany, France, and other European countries that the issue of Communal or Municipal Bonds is one of the functions of Land Credit Institutes.

Since the sanctioning of the borrowing by these public corporations is one of the duties of the State, and as at such times the State Authorities must consider whether the result of the proposed loan will be a productive one, with benefits accruing to later generations, the Credit-Institute need only trouble itself with ascertaining that the State sanction has been obtained; there is no need for it independently to undertake difficult investigations.

Since the methods of issuing, paying interest on, and redeeming these bonds, and also the previous arrangement of the loan-contract between the Credit-Institute and the public corporation concerned, are quite simple, the issue of Communal Bonds might be undertaken by other great Banks as well as by Land Credit Banks only; and these might also have the same authority given to them whenever their constitution is such as to furnish the requisite securities. The *Bank of Japan* might quite well be entrusted with the communal loans, but the result of this course would be in two ways unsatisfactory to the provinces. The want

of competition would probably raise the cost of a loan; for the provinces and other corporations, and, at times when interest was low, the usual conversions of Communal Bonds at high rates, into such at lower rates, could only be done without loss to the debtors (the provinces), if the Bank of Japan were obliged always to hand over to them the whole profits of the transaction after deducting the cost of conversion. The latter obligation, it is true, might be once for all provided for in the concession made to the Bank of Japan; but it would be difficult to avoid the former disadvantage without actual competition.

If now the Bank of Japan were to undertake that branch of business, the Provincial Savings and Land Credit Banks would be the fittest ones to make successful competition, and to procure for the provinces the most favourable terms and all possible profit from the business. But in order to avoid having too many kinds of such corporation bonds, these provincial banks will practically have recourse to the same means as was before proposed in the case the of mortgage-debentures. Just as the *Local* Mortgage Debentures never come into circulation at all, but are exchanged for *Central* Debenture letters, so now the same change must take place in the case of the corporation Bonds; to the public should be offered only one kind of *Central* Communal Bonds.

§ 22.

We may obtain some idea of the amount likely to be

involved, from a translation from the official Gazette, which appeared in the Japan Weekly Mail (27. March, 1886) on the payments for Public Works in the whole of Japan during the period 1876—1882. I only add a casting up of totals, and a calculation of average increase percents, giving it a tabular arrangement.

(See the table on page 183.)

Hence we see that in the above-mentioned seven years Japan spent nearly 22 million yen for its rivers, dredging operations, bridges, breakwaters and harbours; for aqueducts and drainage about $12\frac{1}{2}$ millions, and for roads, independently of railroads, about 10 million yen. On the average about $6\frac{1}{2}$ million yen were spent in each year on these objects. But the *average* does not give a correct picture; for there is a *perfectly steady* increase in the expenditure, as may be seen from the percentages 100, 114, 134, 153, 188, 201, 236. This points to a constantly developing need. A great part of these expenses must be met out of the provincial taxes.

A reference to the Japanese source, the official Gazette, in the matter of the expenditure for public works, shows a distinction made according to the fund from which the moneys came for them. This statement is given in the statistics only for the last year 1882, and is so interesting that I take the liberty to add it here (See the table on page 184.) Three deviations from the original are based upon corrections of misprints discovered by me in casting up the totals.

Payments for Public Works in the whole of Japan from 1876-1882, in Yen.

	1876	1877	1878	1879	1880	1881	1882	Total 1876-1882	Yearly Average
1. Rivers	1,547,439	1,649,704	1,804,771	1,905,930	2,094,469	2,455,681	3,633,766	15,991,760	2,284,537
2. Harbours.....	44,938	5,818	36,025	93,485	43,228	86,673	215,735	525,902	75,129
3. Breakwaters	78,626	120,687	73,543	152,295	204,025	182,201	212,602	1,023,979	146,283
4. Roads	612,955	771,364	1,020,751	1,431,082	1,622,696	2,253,781	2,248,646	9,981,275	1,425,896
5. Bridges	339,931	335,573	506,620	573,997	673,500	782,507	846,416	4,058,454	579,779
6. Aqueducts, Drainages &c	1,280,550	1,560,090	1,797,331	1,799,160	1,841,853	2,110,841	2,169,066	12,558,891	1,794,127
7. Deepening of river beds,	—	63,138	79,792	73,031	81,284	44,642	36,170	378,057	54,008
8. Channels.....	—	—	1,164	2,678	911	—	2,700	7,453	1,065
9. Imperial Palaces	1,595	25	2,966	1,195	150	1,430	898	8,169	1,167
10. Tide and Flood Indicators	2,748	5,611	5,931	5,984	5,958	7,427	7,945	41,604	5,943
11. Foreign Settlements....	81,574	37,226	42,366	52,226	36,151	104,519	82,002	436,004	62,286
12. Various	8,073	5,126	3,617	373	4,652	575	—	22,416	3,202
Totals:	3,998,339	4,554,352	5,374,817	6,111,348	7,508,877	8,030,277	9,455,946	45,033,956	6,433,422
Increase Percent:	100	114	134	153	188	201	236	1126	161

**Sources whence the moneys spent on Public Works in the whole of Japan in 1882
were derived. In Yen.**

	1882, as above	Of these from					Contributions of all kinds (fees?)
		State Treasury	Provincial Treasuries	Communal Treasuries	Private gifts		
		1.	2.	3.	4.	5.	
1. Rivers	3,633,766	395,345	1,962,596	1,234,346	6,291	35,139	
2. Harbours	215,735	76,878	54,056	78,284	1,623	4,895	
3. Breakwaters and dykes	212,602	29,494	92,799	90,192	116	—	
4. Roads	2,248,646	126,538	1,012,887	937,500	132,783	38,938	
5. Bridges	846,416	17,553	451,710	342,572	33,931	650	
6. Aqueducts, Sluices, Reservoirs, Small Channels.	2,169,066	—	145,442	1,976,624	2,488	44,511	
7. Deepening of River beds.	36,170	—	15,772	—	—	20,398	
8. Channels.	2,700	2,700	—	—	—	—	
9. Imperial Palaces.	898	898	—	—	—	—	
10. Tide and Flood Indicators.	7,945	7,945	—	—	—	—	
11. Foreign Settlements	82,002	82,002	—	—	—	—	
12. Various	—	—	—	—	—	—	
Totals :—	9,455,946	739,353	3,735,262	4,659,518	177,232	144,581	
Average per cent:	100.00	7.8	39.5	49.3	1.9	1.5	

According to this report only 7.8% of the whole amount came from the state Treasury; 39.5% from the provincial Treasuries; and almost a half, viz 49.5% from the pockets of the counties, towns and villages; about 2% were donations, and the remaining 1½% probably denote fees.

The 3,735,262 yen spent in public works in 1882 by the provinces form 18.4% of the sum total of provincial expenses, 20,310,241 for the year 1882-3.

Compared with 18,690,037 yen of the expenses of the counties, towns and villages in 1882-3 the 4,659,518 yen spent in public works form 24.9% thereof.

As the expenditure on public works has kept on increasing from year to year, it is most likely that now it forms a still higher percentage of the total expenditure demanded from these self-governing bodies.

If the provinces towns and villages could procure loans for such works which are productive and lasting, by means of issuing Communal Bonds, instead of simply using current income, the provinces towns and villages would be much relieved, and be in a position to undertake still greater operations in opening up communications and regulating the rivers; and it would further benefit the provincial circulation of money by bringing back several million yen every year from the Exchange of the capital to the provinces.



II.

THE LAND CREDIT INSTITUTE

AND

ITS ASSISTANCE IN THE ORGANIZED
COLONIZATION

OF

HOKKAIDO.

(1883.)

§ 1.

Colonization in Japan takes two directions. We must distinguish between *internal* colonization and the colonization in *Hokkaido* as presenting different features. The first makes rapid progress, the second is very slow. For the first, I pointed out in my work on the Credit Foncier §. 7., that there was between 1878 and 1879 an increase of 161,000 Cho of land cultivated with the principal productions. Compared with this how insignificant is the colonization of Hokkaido. We draw from the Kaitakushi (Colonial Office) Statistics for the year 1876.

	Reclaimed Land.
Sapporo Province	5063 Cho 5 Tan.
Hakodate „	2941 „ 8 Tan.
Nemuro „	?
	8005 Cho 3 Tan.

This small total of 8000 Cho* shows that Yezo is by no means a favourite field for colonization, and as a matter of fact only 4702 households had until then immigrated to the Hokkaido. The following are the numbers of emigrants and immigrants from and to the Hokkaido.

*) 8000 Cho=8000 Hectares. These statistics I do not consider to be on the whole of much weight, as they seem to be incomplete. Though the Chinese characters used in the statistics do not bear this meaning, it may be that the statistics only refer to the Kaitakushi estates.

<i>Immigrants</i>	Male	24955	
	Female	<u>10310</u>	35265
<i>Emigrants</i>	Male	1081	
	Female	<u>705</u>	<u>1786</u>

Total increase of population by
immigration during nine years : 33479

The increase of population in Hokkaido (Jan. 1871, 123,668 persons, as against Jan. 1880, 163,355 persons) as shown in the population statistics published by the Koseki-rio, the Home Department, and the Koseki-kyoku, is to be accounted for partly by more complete registration, partly by immigration, and partly by excess of births over deaths. This excess only averaged about 1100 persons per annum.

	Births.	Deaths.	Excess of Births.
1876	4027	2914	1113
1877	3910	3842	1068
1878	4277	2785	1492
1879	3961	3211	<u>750</u>
Total			4423.

Till 1876 the average immigration into Hokkaido was about 3720, and from 1876 to 1880 the average excess of births amounted to 1100. If we may draw inferences from these statistics, which belong to different years, we shall find that under 5000 will give a tolerably accurate idea of the average annual increase.

It is quite natural that Colonization should be rapid in the principal islands, and slow in Hokkaido. Everywhere there is uncultivated land in abundance; the young farmer of the main islands who feels that he has the energy to commence a new settlement in the mountains, has quite near to him the mountains and moors of his parish, and before setting to work he can go with his father, brothers, friends, and relations, to inspect the ground and choose the best spot. He keeps up the connexion with his home, and can partake in all its joys and festivals; he has to face no unknown something, as he would have to do if he went to Hokkaido with its different climate and its different agricultural requirements.

§ 2.

If the government consider this question only from an *economical* point of view, it might well be indifferent as to *what* places are colonized so long as colonization takes place. Nay, the extension of agriculture on the main island might even be more profitable than in the Hokkaido, inasmuch as the climate is better. But colonization in Hokkaido is mainly a *political* question, the country must be quickly filled with a Japanese population so thick that the locally raised regiments may suffice to defend it from all desire of annexation. In my opinion hostile attacks on Hokkaido must be expected, not indeed in the present, but yet in a discernible future.

It seems to me that a Japanese statesman cannot consider Hokkaido as an assured Japanese territory until it possesses a population of 2,000,000 instead of the present 200,000 Japanese inhabitants. Since private voluntary immigration does not suffice, a government system of colonization must take its place. A country is defended not only with the sword, but also with the hoe and the plough. Hokkaido is called the Northern Door of Japan; it concerns the country to place there a powerful door-keeper,—a numerous and prosperous population. I would have the Land Credit Bank play a considerable part in the accomplishment of this task.

§ 3.

In my paper submitted to the Nobles' club, I pointed out that *interior* colonization might be assisted, not directly, but indirectly by a Land Credit Bank (compare § 19 "Facilitation of interior colonization.") Here I will content myself with showing in a brief general outline how I think an *organized colonization of Yezo might be worked out with the cooperation of a land credit bank.*

For the sake of clearness, I will introduce numbers; but I will remark at once that these numbers were only chosen in order to have a certain example, and that they can be altered at will. Also, for the sake of convenience. I will use round numbers; I shall not speak of the 41 'fu-ken' of the main island and of the 3 ken in Hokkaido, but of

40 ken and one Hokkaido ; nor again of 36 ku and 709 gun on the main land, but, in round numbers, of 800 gun ; that is, of 20 gun on an average to one ken, etc.

Just as the organization of provincial finances might be carried out by means of a special Fuken bank, instead of with the aid of the Land Credit Bank ; so the colonization of Hokkaido might be carried out by an independent Colonization Bank instead of the Land Credit Bank. I consider that an organic union of both similar institutions for granting long credit is practicable, but in order briefly to distinguish the peculiar character of the bank's business in Hokkaido, I shall even call this branch of the bank by the name of the " Colonization Bank."

I allow a colonization *bank* to assist in colonization *in order that the state may have to contribute nothing at all to the colonization of Hokkaido*. It is to the private advantage of settlers in Hokkaido to settle in that country, there to receive assistance in obtaining fields, forests and meadows, house and stabling, cattle and implements, fruit trees and seed corn. These things have a high, full value of their own, bear crops and fruits, and allow the colonist gradually to pay back all that was at first advanced to him. On the organization of this business of making advances and repaying them, nearly every thing depends ; that is, upon the organization of a system of long credits for purposes of colonization.

According to the statements of the Survey-Department, the Northern provinces have the following areas.*

*) See Transaction of the German Asiatic Society, Vol 14. p. 120.

§ 4.

	Area Sq. Ri.	Area of Smaller Islands.	Total Sq. Ri.
Hokkaido	5,056.78	25.66	5,082.44
Kunajiri	104.03	25.26	129.29
Etrofu	468.78		468.76
Chishima	413.44		413.44
			Total 6,093.93

Of these 6000 square ri (=about 92,500 square kilometre) a small part is already settled, and another part will probably be found unfit to receive colonists. Let us suppose that the task before us is only how to colonize 4000 square ri. For political reasons this ought to be done within 25 years. We will reckon that all possible preliminary steps take 5 years. Then it would remain for us to settle 4000 square ri in twenty years, i.e. about 200 square ri every year.

There is no doubt that the Hokkaido could support a very large population.* It lies in about the same latitude (41° to 45° N.) as North Spain, South France, Central Italy. Marseilles, Rome, Venice, Constantinople lie in about the same latitudes. Yet its climate is somewhat colder than the above mentioned countries and towns. According to the map showing the isothermal lines of the average annual warmth, compiled by the celebrated

*) During my journey in Hokkaido in 1881, I found in some places distinct traces of a very considerable population which had evidently existed in former times, but had now disappeared. The Ainos say that they destroyed the former inhabitants of Hokkaido.

Meteorologist Dove,* Hokkaido has a climate resembling South Russia, Austria, Germany, Belgium, Holland, North France, England, Scotland, Ireland, Denmark and the southern extremity of Sweden. Now these countries have the following population per square ri: †

Year.	Land.	Per Square Ri.
I.		
1880	Saxony	3054
1879	Belgium	2767
1881	England and Wales	2647
1879	Holland	1879
1880	Baden	1602
1880	Württemberg	1557
II.		
1880	Prussia	1207
1880	Austria	1135
1881	Ireland	943
1880	Hungary	750
1881	Scotland	728
III.		
1879	Italy	1518
1876	France	1078
1880	Switzerland	1063
1877	Spain.	504

In the above table the countries put together in Group III are such as have a somewhat warmer climate than

*) Stieler's Hand-Atlas, No. 6.

†) Calculated at 15.4 square kilometres to 1 square ri, according to the Jahrbuecher für National Oekonomie und Statistik. 1882. Vo. V. No. 4. and 5, p. 442 et seq.

Hokkaido, although they lie in about the same geographical latitudes. They have a population of from 504 to 1518 per square ri; hence we may infer that the somewhat colder Hokkaido would be able to support only a somewhat smaller population. Of course, Spain has come down in population for other reasons, and so its small population (504) is no criterion. From these statistics it would seem that Hokkaido could support a population smaller than that of Switzerland, larger than that of Spain, i.e. one of about 750 inhabitants to the square ri.

Groups I and II embrace those countries which have a climate about identical with that of Hokkaido. The countries in Group I, with their *high* populations of from 1557 to 3054 inhabitants, owe the density of their populations to *industry*. This we cannot reckon upon for the present in Hokkaido. But Group II contains states principally *agricultural*, though in them also industry is highly developed. The populations of these countries (728—1207 per square ri) would seem to be suitable for Hokkaido. Hence we infer that to assign to Hokkaido a population of 750 persons to the square ri does not seem to be overpopulation.

This would be a far smaller population than is found in the rest of Japan. The rest of Japan contains about 18000 square ri and about 36 million inhabitants or about 2000 inhabitants to the square Ri.

(See table on next page).

Now the task is not immediately to bring Hokkaido to its full strength in population but only to take care that by

Area of Japan without Hokkaido and the Kuriles.

Imperial Survey.

	Area in Square Ri.	Area of the small islands	Total Area Square Ri.
Nippon	14494.49	76.20	14570.69
Shikoku	1151.24	30.18	1181.42
Kiushiu	2311.86	199.61	2511.47
Awaji	36.55	0.18	36.73
Iki	8.55	0.26	8.81
Tsushima	43.95	0.38	44.33
Oki	21.88	0.17	22.05
Sado	56.33	0.01	56.34
Ogasawara	4.65	—	4.65
Liukiu	258.26	—	258.26
Japan without Hokkaido and the Kuriles	18387.76	306.99	18694.75

According to the Koseki-kiyoku the population of all Japan was estimated 1. Jan. 1882 at 36,706,418.

the end of the next generation a population of 1,800,000 persons be settled on those 4000 square ri, or a population of 450 per square ri, making a total of 2 million with the present 200,000 inhabitants of Hokkaido. Every male colonist will probably provide himself a wife, and after the time of one generation every family may be reckoned at five persons. Hence our present concern is only to settle $\frac{1}{3}$ of 1,800,000, or 360,000 men. This would only mean 90 men per square Ri. As we saw above that the Hokkaido would not be overpopulated with 750 per square ri, 90 men, or with families 450 persons, per square ri will not be too much.

Hence our task is, during the next 20 years to settle 90 persons per square ri upon a district of 200 square ri every year. $90 \times 200 = 18,000$ men. 18,000 men from the 36 millions of Japan means 5 persons out of every 10,000.

§ 5.

As the standing German army (upon active service) bears a proportion of 100 men to every 10,000 inhabitants, it is clear that the emigrants sent to Hokkaido during the 20 years would bear the same relation to the total population here as the standing army in Germany *always* bears to the whole population there. Now these colonists will support themselves, and not be, like the German soldiers, a burden upon their country. Moreover, they will not sacrifice their time to the state; they will for their own advantage erect houses and farmbuildings, take wives and produce children. If it is possible for Germany to support 100 men out of every 10,000, in order to secure herself against France and Russia, Japan ought to be able for her own safety to perform the far lighter task of settling every year one twentieth part of that number, viz, 5 men in every 10,000.

§ 6.

As the population of Japan is increasing rapidly (1 per cent yearly *apparently* according to official statistics, but

in reality only perhaps $\frac{1}{2}$ per cent), it is by no means too much if 5 men and 5 women, or 10 out of every 10,000 of the population emigrate yearly to Hokkaido.

18,000 men from the whole country, or out of 40 provinces, are to colonize 200 square ri.

450 men from 1 province or from 20 gun, will colonize 5 square ri.

If the people emigrating from every 2 gun, (=45 persons) were to form a village then about $\frac{1}{2}$ square ri (=800 cho or hectares) would be assigned to every village in the Hokkaido.

§ 7.

That this amount of land is abundantly sufficient for one village will be clear from a reference to the decrees of the Taihō-Riō* about the distribution of the "*Kubunden*." According to these laws the family was to receive 2 tan for every free male over 5 years old, $\frac{2}{3}$ tan for every female and $\frac{1}{3}$ tan for every slave. Thus a family consisting of a father, mother, 2 boys and 2 girls of over 5 years of age, would receive 8 tan or 2,400 tsubo or 0.8 hectare.† The military colonists settled in Hokkaido by the Kaitakushi Department received about twice as much;—5000 tsubo of land, besides ground for building.

Let us adopt the excellent distribution *methods* of the Taihō-Riō, not only as regards the "*Kubunden*" (mouth-

*) *Taihō* a Japanese period A.D. 701—703; *Taihō-Riō*=Statute book of the period Taihō.

†) 30 tsubo (1080 Japanese sq: feet)=1 ar; 10 ar=1 tan.

partland), but also as regards the “ Iden ” (rank land), the Kwanden (public land) and the “ Onchi ” (fruit tree land—in the Taihō period mulberry and lacquer trees) ; only as Hokkaido is not quite so fertile let us give to each individual twice as much land as was given in the period of Taihō on the main islands. But whereas in the Taihō period the land never really became the property of the cultivator, in Hokkaido it will become the colonists property as soon as he has paid back the advances made to him by the Colonization Bank.

§ 8.

For this gradual process of obtaining possession of property we can find in North American colonization very practical examples. There a property is often developed out of a tenancy. For instance, in Texas* there are 53379 farms let on metayer and 12089 farms let for money rents. When the tenant enters upon his farming he receives an uncultivated piece of land, suitable implements, stock, a simple wooden farmhouse, seed-corn for one sowing and fodder to last until next harvest. (In Japan we should have to add food for men until next harvest). For this the farmer in Texas pays one half of the gross produce to the owner. As the virgin soil is productive for several years, even without manures, this high rent is possible.

*) F. Sartorius von Waltershausen. Die Vertheilung des ländlichen Grundeigenthums in den Vereinigten Staaten von Amerika. Jahrbücher für Nationalökonomie und Statistik. 1883. VI. 471.

The income of the tenant is often so large that he still has a surplus and can buy cattle, implements and machines for himself. The contract contains the provision that when the tenant has repaid the landowner for the advances of cattle, implements, seedcorn and fodder, which have been made, the latter is thenceforth to receive only a third of the gross receipts after each farming year. From that moment the condition of the tenant improves more rapidly. In a few years, if he has been living economically, he buys the house from the landowner, and then pays a still smaller rent. Finally he becomes proprietor of the whole farm by purchases of one field after the other, accompanied by gradually decreasing rents. In 10 or 12 years a thrifty and experienced farmer can thus with the aid of his family become a free farmer and a prosperous proprietor. More than a quarter of the four million farms in the United States are in the hands of tenants. (Census 1880).

§ 9.

In Hokkaido the Government owns the soil. If it settles the 200 square ri, as above proposed, it remains proprietor for the present; the settlers are in the first instance tenants. Under the commission, and therefore under the guarantee of the Government, the Colonization Bank makes certain advances to these tenants, or furnishes them with certain articles at fixed prices (boards, beams, implements, cattle, young fruit trees, seedcorn, provisions.)

For every one of the 45 tenants in the village the *Kocho** keeps an account of the debts to the Colonization Bank. To this account the interest and other dues are added every half year.

By the system of mutual responsibility, every village forms a unit: each individual having a share of responsibility in the debts of the others. This system is worked in the County-Credit-Unions of the noble land-proprietors in Prussia, and in the well known Schulze-Delitsch Advance and Credit Banks. It almost absolutely secures the Colonization Bank against losses by failures of payment. Where such a system is at work, it can advance the money without fear. Every one of the 45 tenants in the village becomes more deserving of receiving credit: hence the most advantageous terms possible can be granted. Then, the public regards the Bank as running no risk, and the "*Colonization Debentures*" stand well in the market.

If the 45 tenants of a village are to be surety for one another, the *Sonkuwai* or village assembly must be allowed a certain right of supervision over the individual until he is free from his debts, in order to see that each one take due care of his cattle and fruit trees as prescribed in the general directions, that he really uses his seed-corn for its proper purpose, and does not waste or misappropriate the advances made to him by the Colonization Bank. Under certain circumstances the *Sonkuwai* has the right

*) Headman.

to proceed against, or even if necessary to remove a bad tenant. This reciprocity will have another good influence upon the village community. It will make each member more willing to help the others; and that mutual help is of the utmost importance, especially in new colonies, with their clearing of land, building of houses, and overcoming of many other difficulties.

I fancy that, as the villagers all come from the same two counties in the mother country, they will already be to a certain extent organized before starting for the north. The 45 choose their own headman (*Kocho*) and every 11 of them choose their own alderman (*Vormann*); so that every village will consist of 1 *Kocho*, 4 aldermen, and 40 men. The *Kocho* and the 4 aldermen form the governing body of the village, which at fixed intervals reports to the Village Assembly, makes proposals, asks for opinion on certain matters, &c. I need not develop further this outline sketch of the constitution of a colonial village.

§ 10.

The 450 men, or the occupants of 10 colonial villages, were to be natives of the same ken. They colonise 5 square Ri, which constitute 1 *Shō-ku* (or small district). The 10 *Kochō* constitute the *Shōku-kuwai* (representative assembly of the small district or diet). Before their departure for Hokkaido either they choose 1 *Shō-ku-chō* (president of the small district), by preference one of *Gunchōs* (county sheriffs) of their native ken, for the

the Shō-ku-chō in point must be well acquainted with all county business; or the Kenrei (prefect) of the native Ken appoints the Shō-ku-chō, where possible from amongst the Gunchōs of his own Ken.

The Shō-ku-chō books the debts of every village to the Colonisation Bank as one sum; he does not book the debts of the tenants individually, but the aggregate debts of each of the 10 villages. He adds to it the interest due to the Colonisation Bank and the taxes; in like manner the annual official expenses of the Shō-ku agreed to by diet of the Shō-ku, and gives every village notice of the share that falls to it.—The 10 villages of a Shō-ku constitute together one mutually responsible, cooperative Union, so that, if at any time a whole village, perchance in consequence of some misfortune like fire, earthquake, hurricane, cattle disease, &c., should not have been in a position to meet its liabilities towards the Colonisation Bank, the other villages may be responsible for them, on condition of being repaid later on by the village that has fallen into arrear.*

§ II.

The 40 Shō-ku of one Hokkaido colonisation ken constitute 4 Dai-ku (large districts), each containing thus 10 Shō-ku and having an area of 50 square Ri. At the head of each large District is a Colonisation Bank Inspector, “Kensatsu-i-in,” proposed by the Colonisation Bank, and

*) By the establishment of agricultural insurance the dangers of mutual cooperative responsibility are reduced to a most satisfactory minimum. \

appointed by the Minister of Agriculture (or of Home Affairs, or of Finance). This officer has no state functions to perform, but represents the interests of the Colonisation Bank, alike towards the Kochōs and the Shō-ku-chōs by means principally of inspection.

§ 12.

The 4 Kensatsu-i-in of one Hokkaido Colonisation Ken constitute an assistant council (Djochi-i-in) to the Kenrei in point.

The Kenrei is appointed by the Daijo-kuwan on the proposal of the Minister of Agriculture (or of Home affairs). Besides the other work of a Kenrei, the duty of booking the debts of each of the 40 Shōku to the Colonisation Bank falls on his office. He adds the interest and fees, and likewise the official expenses of the Ken, agreed on in common with the 40 sheriffs, and controlled by his council. The 40 small districts of a Ken make one mutually responsible cooperative Union, so that all of them together answer for the debts of each individual district.

The expenses incurred for the topographical survey and mapping out of the Ken territory in preparation for its colonisation, the cost of laying down roads to open up the territory, of canals, harbours, &c., would also be advanced by the Colonisation Bank, and charged to each Hokkaido Colonization Ken. All the Ken together constitute one mutually responsible General Union.

§ 13.

The Colonisation Bank raises all the money it requires through the issue of "Colonisation Debentures" for the interest and redemption of which in the manner just explained, the Colonists, the villages, the districts, the Hokkaido Colonisation Kens, and in the last resort the State, are held responsible.

§ 14.

An approximate estimate of the total cost may be gathered from the fact that when Litthuania was colonised by the Prussian King Frederick William I. the settling of the 29,000 families of colonists, who immigrated from 1722—25 and 1732—36, cost the State on the average 400 Thalers (300 silver Yen); a sum which in after days that eminent coloniser, King Frederick the Great of Prussia (1740—1786) took to be the normal cost.* The reduction of the land-tax for Hokkaido to 1% through the proclamation No. 161, of 26 Dec., 1876, as also the grants, which the state in accordance with the imperial decree No 10, of 24 April, 1883, grants to emigrants to Hokkaido (free passage, 5 sen a head and for every Ri of the overland journey in Hokkaido, 10 yen for a house, 8½ yen

*) According to Dr Max Schwarzbach. Friedrich Wilhelms I. Colonisations work in Litthuania. (Königsberg 1879).—Every colonist received on the average 24 Cho (60 acres) with the requisite meadow-land) together with right of pasturage, wood and fisheries, the requisite cattle, horses, house and farm implements, grain for seed and for consumption, immunity from all taxes, contributions and other public burdens, and from military service for several years. cf. Jahrbücher F. N. und St. 1880 I. 332 ff.

to start in business, and $1\frac{1}{2}$ yen for seed), appear to me to be still insufficient. They will have some effect, but the results will not be so large nor take effect so rapidly as the state for political reasons must wish.

If we also put the total advances made by the Colonisation Bank for each colonisation ken and its 18,000 families at 300 silver yen per family, we require annually 5,400,000 silver yen, a sum about equal to that which the Japanese State pays out now every year in temporary advances for the introduction and support of industries (according to the Budget for the 15th year of Meiji, 1882, 5,260,000 yen, and for the 16th year 5,000,000), a sum which the Japanese state ought to be perfectly well able to raise as an advance for an object at least as important, and, from a political point of view, far more important, viz., the colonisation of Hokkaido.

§ 15.

How heavily such a debt of 300 yen would burden each colonist family, depends entirely upon the rate of interest. Should the advance not be made by government, but be raised through the sale of Colonisation Debentures in Japan, these might demand about 10% interest, and, apart from all official costs of the colonisation Bank, apart also from any profits of the latter, there would result, the completion of their redemption within fifty years, an annual charge of 10 Yen 8 Sen 6 Rin pro 100 Yen; but under similar conditions at a 5% rate of interest, an annual charge of only 5 yen

47 Sen, 8 Rin would result. So with an initial debt of 300 Yen every colonist would have to raise for fifty years 13 Yen 82 Sen, 4 Rin more when interest is at 10% than when it is at 5%. But here again the Government, or the colonisation Bank, will be able to allow the lowest rate of interest, if it raises the money by foreign loans or by the sale of the Colonisation Debentures in a foreign country, a course which is naturally only practicable if the state is politically strong enough to guarantee its own independence.*

Just as in modern systems of practical economy credit is an important element to the individual merchant for the extension of his business, so too is credit in the economical system of the world of importance to nations. Of course if credit is employed in extravagant, useless, inconsiderate, unproductive outlay, then a debt so originating is a misfortune and an overwhelming burden (Turkey, Egypt); but employed in a rational manner in the development of the resources of a country, it is the most powerful engine of advance and strength. Thus, for instance, Sweden at the end of 1880 had a Credit Foncier Debt of 77 million silver yen, or of 16.6 silver yen per head of her population, of which amount German capital has contributed over 60%. Sweden thereby has wonderfully developed her resources, is in a most flourishing condition, and, though

*) *Addendum.* Since 1883 the current rate of interest in Japan has fallen so much that at the present moment (1887), numerous purchasers at par might be found in the country itself for Colonisation Debentures bearing interest of only from 5 to 5½%.

only a small state, has nevertheless not in the least thereby become politically dependent upon Germany. Japan too, if she wishes to keep pace with the economical development of other countries, will be obliged to employ the same economical means that they do. If those nations accept credit one from another on a large scale, Japan must do the same, as soon as she feels herself politically strong enough to do so.

According to the rate of interest at which the colonisation Bank raises money, the impost quota levied on the harvest of the colonist must be larger or smaller.

§ 16.

Since the sale of the country produce on the spot by each colonists himself, would be exceedingly unprofitable for him, payments to the Colonisation Bank are made in kind. The headmen of every village, with the assistance of the 4 aldermen, collects the taxes in kind, weighs and measures the quantities, estimates the quality according to standards, and gives every colonist a receipt for what is taken. By the headman it is handed over to the sheriff at some fixed spot in the district, who gives him, after he has verified the correctness of the headman's list as to kind, quantity and quality, an official receipt, and forwards the stock with accompanying lists to the provincial office in return for a receipt in acknowledgement. In his books the headman credits the colonist, the sheriff the village, the provincial office the

district, the Colonisation Bank the province, with the payments *provisionally* as being such in kind, quantity and quality. Only after the realisation of the produce into money has been accomplished through a special office, in which the colonisation Province, the colonisation Bank, and the State are equally represented, information of the average selling price for each sort and quality is given to those interested, in due order, and the sum of money resulting according to the estimates is accredited to the province by the Colonisation Bank, to the district by the provincial office, to the village by the sheriff, to the colonist by the headman.

§ 17.

The cost of transporting the produce of the country from the sheriff's place to the provincial office is borne by the provincial treasury, in order to equalise as much as possible the disadvantages of distance for the more remote district.—I may here remark that the partition of the 40 district territories of the Colonisation Province amongst the people of the 40 home provinces is decided by lot.

§ 18.

I will not enter into the further requirements for the organisation of such colonisation on a large scale; it may suffice to mention that large farms with stock (horses, oxen, sheep, and poultry, such as geese, ducks,

fowls) will be necessary, in order to hand over to every household the necessary animals, large nurseries will be wanted, to be able to distribute the fruit-trees, that it may come to pass as once upon a time in Mommu-Tenno's days, when every full-sized family had at least 300 mulberry trees and 100 lacquer trees to plant, every middling-sized family at least 200 mulberry trees and 70 lacquer trees, and every small family 100 mulberry trees and 40 lacquer trees, and for every 2 hectares of land borrowed from Government one head of cattle was to be kept. Manufactories for waggons and agricultural implements would have to be erected, in order to meet cheaply the wants of 18,000 Colonists every year. Apparatus for felling trees, and portable saw-mills must be provided, which, after they have been used a year or two in one colonisation ken to make beams and boards for the houses, may be taken to pieces again, and erected in that neighbouring ken which comes next in order. The whole available strength of the 18,000 men will be first employed in road-making and forest cleaning on piece contracts made with gangs of men; e.g. the small units of ten men with their alderman, or the greater units of village populations, before the partition of the district territories and parochial areas and separate plots takes place by lot amongst the different gangs and individuals. Provision must be made for wives and children. They must either follow later on, or industrial occupation (weaving, hemp and flax picking, netting, &c), must be provided for them during those months in which

they cannot as yet be of help to their husbands on the spot in the founding of the new settlement. Doctors, teachers, priests, and special craftsmen must be apportioned amongst the districts, in short, there will be far more to do than I can here even only hint at.

The chief point, however, is that in the organisation sketched above, a method is shewn, how to distribute fairly all the expenses, and that this organisation assures the certainty of repayment.

§ 19.

Lastly let me call attention to one circumstance, which absolutely and perfectly secures to the creditor the final liquidation of this colonisation debt. We saw above that to each village there comes an area of about 800 hectares. If each colonist receives 2 hectares, that takes away 90 hectares, and there still remain about 700 hectares, the property of the state. One portion of this certainly may be advantageously given to each village as common land for pasture and wood, one portion will also be utterly unsuitable for cultivation, being too rocky, sandy or marshy. But still in every village there will remain a large area belonging to the state. This land is *at the present moment* absolutely valueless. In the neighbourhood of Nemuro I saw pieces of land reaching as far as the eye could see, which were sold for 350 yen. As soon then as these numerous large areas are in the midst of others which have been colonised, and consequently have also been made accessible by roads,

they acquire a considerable value and selling price. By their sale to later settlers or even to the original colonist and their descendants, the state will then make a very considerable profit. The state therefore runs not the slightest risk in becoming security for the colonisation debt, raised through colonisation debentures.

§ 20.

From what classes then should the settlers be taken? Should it be from the Shizoku?*

One of the most important tasks now lying before Japanese statesmen is the infusion of the Shizoku into the trading and producing population. The warlike spirit too, which dwells in them, would make them well qualified to become a bulwark against foreign attacks, and already large bands of them have been settled in Hokkaido by several of their former Daimios, and in other provinces also there exist some thriving settlements of Shizoku. Should the experience made in Hokkaido with the Shizoku settlements have proved favourable, then of course the Shizoku will be specially sought for in the present proposed colonisation. I do not know what results have so far been attained. But I should be of opinion that the task of settling down in an untouched country, on virgin soil which has not yet been cleared for cultivation, is infinitely more severe for those who have not themselves had a long practice of agriculture than for young peasant lads, who from their childhood

*) Former military class.

have been acquainted with the use of the axe and the mattock. The instances in which a Shizoku has not succeeded in making his *new* settlement a prosperous one, will be far more frequent than those in which a "peasant" has failed. It is true the principle of the mutual solidarity of each group and of the different combinations of groups would give full security to the whole fabric of credit even if there should happen to be amongst them a large number of bad housekeepers.

For the colonisation of Hokkaido I have had in my mind principally *peasants*, second and third sons of rustic parents, who are accustomed to and well acquainted with tillage of the soil.

§ 21.

In all probability the enlisting of *volunteer emigrants* from the *peasantry* will, if the material assistance, which I have proposed above, be given, soon attract the requisite number of people out of every Gun and Ken. But should this not be the case, I think the state would be quite within its rights if it "conscribed" such Hokkaido colonists in exactly the same way in which people are levied for military service. The end in view is in both cases the same, a political one, the protection of Japanese territory. It is true that nowhere have we had any precedent either for such conscription of people for colonisation or for their organisation by means of a colonisation bank. But why should not Japan, if she finds the ideas here unfolded to be correct and

practicable, be the first country to strike out such a path, after she has once made the experience that purely private emigration to the Hokkaido is not sufficient for her purposes?

§ 22.

Through more densely populating the Hokkaido in this way, a far higher value would also be given there to the produce of the ocean. It is lamentable to see there the most magnificent table fish, man's daintiest food, boiled down in incredible quantities only into low-priced oils and guano. Had the fisheries there a country in their rear to fall back upon, where the fish caught could be sold, as on the other chief islands, the large vagrant fishing population (about 60,000 people from the north-east coast of the chief island, who every year go up to the Hokkaido and then return again) would soon become resident there. The fact that provision could be plentifully procured in the neighbouring place of production, would be the death-blow of that shameful "Truck system," by which articles to food are sold or charged at high prices to the fishermen by their employers, and instead of only a few rich fishery-capitalists there would be a large well-to-do fishing population occupying the coasts of Hokkaido.



III.

THE REDUCTION

OF THE

LAND TAX.

(1878).

§ 1.

The Money Land-Tax.

The Japanese land tax during the Meiji period has, in my opinion, become altered in five respects. It has become,

- 1) smaller ;
- 2) uniform for all parts of Japan ;
- 3) uniform for large and small landowners, pressing less heavily on the small, more heavily on the large ;
- 4) instead of a tax in kind, a tax in money ;
- 5) instead of a percentage on fluctuating gross receipts, a percentage remaining constant from year to year on a stable capital.

Every one of these five changes appeared a remarkable and praiseworthy step in advance. The first, second and third points proved certainly so ; the fourth and fifth, however, exhibited unforeseen drawbacks in working

The payment of the tax in money is in one respect exceedingly convenient for the state finances. It avoids the trouble of storing up the rice, and the difficult checking of the quantities and qualities of its deliverable amounts, but, above all, it relieves the Government from being influenced by the fluctuating prices of rice, which may upset the estimates of any budget. The last seems to me to have been the most weighty reason for the introduction of the money land tax, which for the same reason has been introduced into all European

States, into India and North America, and in truth into almost all states. The payment of the tax in money is for another reason presumably advantageous to the peasant. Presumably, just as in Europe, the price of grain will gradually rise; then the farmer receives more for his grain; should he make the same contribution as now, he will pay a less percentage on his income, and is thus relieved. Again, the alteration of the percentage tax on fluctuating gross receipts to one on stable capital remaining constant from year to year, is decidedly an improvement in the management of the state finances. The fixing of the land tax contribution at a settled rate was possible in the states of Europe, and seemed to be so for Japan.

Point 4 and 5, nevertheless, when put into practice in Japan, shewed disadvantages. The Government attained only one of their aims, the better regulation of the states' economy, while they only partly fulfilled their intention of relieving the farmer. The farmer complained that, though now he ought to pay less than previously, the payment *pressed more heavily* on him.

Point 4. The collection of the high money land tax compels the farmer to take to market all at once a very large portion of the grain he has on sale. It compels all his neighbours at the same time to do the same. The supply therefore is greater than the demand at the time; the corn-merchant in consequence becomes a speculator in buying; the merchant *can* wait, the farmer not; this lowers the price, and the farmer receives for

his rice less, simply because in order to pay the land tax he is compelled to sell a great part of his harvest at a loss. Remedy: So long as the tax was paid in kind, *one* day of payment at all events soon after the harvest was the least harassing; out of the abundance of the harvest it was easy to make deductions, and the state was sure of its tax. But when the tax is in money the least harassing way would be to have many days of payment distributed over the whole year, and so to allow time to accomplish the conversion of the grain into money. In Prussia, where the land tax is 4.210% of the nett receipts, and 1842% of the gross receipts,* twelve days of payment per year have been considered necessary. Within the first eight days of every month one twelfth of the annual amount of the land tax must be paid. If that were introduced here, it would free the farmer from being *obliged* to sell his grain to defray the tax; the supply of grain would be distributed over the whole year, and would keep pace with the wants of the consumer. The farmer would receive more money for his grain.†

Point 5. How harassing the present fixing and stabilising of the amount of the tax must be, will be evident from the following. In the official Japanese Catalogue of the great Exhibition in Philadelphia I find, amongst others,

* According to E. Engel's "How heavily does the land tax in Prussia burden Agriculture?" Ztschr. D. K. Preuss. Statist. Bureau, 1867, Page 154.

† Postscript. The land tax payment was extended:

the following remark: "In the province of Higo, which is considered to be one of the most fruitful, the best land in the neighbourhood of the village of Yamashiro produces in good years 3729 liters a hectar, and in bad years 1891 liters." Case A.) "The worst land produces in good years 1891 liters, and in bad 1582 liters a hectar." (Case B.) "In the province of Musashi, which in point of fruitfulness is not specially remarkable, the best land in good years gives on the average 3092, in bad years 1465 liters a hectar." (Case C.) From this it is manifest that the variation between good and bad years is very considerable.

by an ordinance of Jan. 24, 1876:
for 9 months (from 1. July to 3 March):

„ „ by an ordinance of July, 1877:
for Rice lands „ for 5 months (from Dec. 1st to Apr 30th)
for other land „ for 6 months (from July 1st—Dec. 31).

by an ordinance of 17 Febr. 1881:
for Rice land „ 3½ „ (1.XI—15.XII, and 1.I—28 II.)
„ other land „ 4 „ (1.VII—31. X.)

by the ordinance No. 24. 1882:
for all land except Rice land „ 2 „ (July and January)

by the ordinance No. 36, Nov. 1883:
for Riceland „ 3½ „ (1.XI—15.XII, and 1.II—31. III.)

by the ordinance No. 15, Jun, 1885:
for Rice land „ 5½ „ (1. Nov.—20 April.)

At the same time, the period was divided, sometimes into 2, sometimes into 3, sometimes into 4 terms, with a varying distribution of the instalments payable at each term.

Instead of the distribution over 12 months, which was recommended, a greater condensation of the period of collecting the taxes took place. The times of landtax for the payment for rice land and other land together, had the following durations, according to the decree in the year

1877	10 Months	(1. VII.—30. IV)
1882	4½ „	(1. XI—15.XII, 1.I—28. II. and July)
1885	6½ „	(1. XI.—20. IV, and July)

then the yield of the bad year, which is mentioned above,
would be

If we put down the crops in general average years as exactly 100, then we must take

Farming expenses		15 parts
Land tax		
2½% State land tax	21.25 parts	
½% Provincial land tax	<u>4.25 "</u>	25.5 "
Interest on capital		<u>59.5 "</u>
		<u>100 parts</u>

If we put down the harvest in bad years as exactly 75, then we must take

Farming expenses (remain unaltered)	15 parts
Land tax " "	25.5 "
and there remains then for the	
Interest on capital only	34.5 "
	<u>75 parts.</u>

According to statistics of the Minister of Finance (1874) e.g.:

1.	2.	3.	4.	5.	6.	7.	8.
In the case of Rice land	Value pro Tan.	Estimated yield of rice pro Tan.	Average price of Koku rice	Total produce pro Tan.	Taxes and Interest on capital combined	Farming expenses consequently	Percentage of Farming expenses to estimated total yield
In Tokio-fu.	Yen	Koku	Yen	Yen	Yen	Yen	Yen
" Shira-	65.31	1.45	5.30	7.685	6.532	1.153	15 %.
kawa-ken	58.39	1.50	4.58	6.870	5.839	1.031	15 %.

The farming expenses (in column 7) I have computed in an indirect method, by reckoning (in column 6) the per cent of the value of rice land pro Tan for taxes and interest on capital combined, and subtracting this result from the amount of the total produce pro Tan (in column 5.) Column 8 shows the proportion of what remains over for farming expenses to the total produce, to be exactly 15% in both cases.

Addendum. Whether, in the land tax assessment, the apparently generally assumed proportion of the farming expenses to the average yield, invariably or as a rule corresponds sufficiently closely to the actual fact, may be one of the most difficult questions to decide. If it is incorrect, this circumstance may lead to great hardship. Special enquiry into the matter is strongly to be recommended. For the present work I consider myself justified in being contented with regarding this assumption as provisionally correct. In Prussia, according to Engel, l.c., the average taken for the whole state gives the farming expenses as constituting 80 % of the gross income.

Reckoned according to columns 2 and 5 the total gross yield of one year (column 5) would represent 11.767% of the value of the farm. The land tax amounts to 3% of the value of the farm. From this it follows that the land tax constitutes 25.5 parts of the gross yield.

In bad years certainly prices would rise, but, under the competition of the corn import from foreign countries, probably not so much as to cover the farmer's reduced harvest, and in any case, where a poor harvest does not happen throughout the country, nor throughout a province, but only in isolated districts and to individual owners, then no adequate compensation is possible, and how hard it is then to give up 25.5 parts as tax, and retain only 34.5 parts !

The remedy in my judgment lies in the establishment of *Land-tax-Relief-Funds*, similar to those in the *Prussian Rhine Provinces*, and upon which I have already reported in another place. In Prussia, an addition of 2% to the sum total of the land tax sufficed to endow the relief funds. In Japan, more serious natural occurrences influence the harvest. Floods, droughts, typhoons, earthquakes, finally damages through insurrections and war, are liable to happen, and for this reason 5 to 10% might here be requisite and desirable.

Let us assume that about 10% of the land tax or 2.55 parts of the estimated average crop were allotted every year to the relief fund. This would then, probably, even in calamities general over the country, be in a position to pay the land-tax to the state instead of the tax payers (—the duty of the county relief—) ; and even, as in Prussia, to afford extraordinary assistance to those who meet with misfortune (—the duty of the central and provincial funds in addition to their other duty of eventually covering the landtax—). To accentuate these two dif-

ferent duties I am speaking, in the one case, in a restricted sense of the *land tax relief* fund, in the other, of the land tax fund.

The fund might be divided for instance, with reference to state, province, and county, as follows :

0.25 parts for the State land tax fund,

0.8 - - - - provincial - - - -

1.5 - - - - county land tax relief fund.

Total 2.55 parts as above.

Where the county land tax relief fund is insufficient, the provincial land tax fund may step in; where the provincial land tax fund is insufficient, the state land tax fund may step in.

With regard to the appropriation of the county land tax relief fund let the provincial assembly* decide, on the recommendation of the county Diet, subject to the right of veto by the provincial governor.

*) Addendum. The assumption of the existence of a county Diet (Gun-Kuwai), rested on erroneous information.—The mistake that a county Diet exists is very widely spread. Even in the publication of the Imperial Japanese Household Department, "The Empire of Japan," (Yokohama, 1881) is it maintained, on page 9.—In my elaborate draught of a bill respecting the Land tax Relief Fund ("Relief Fund for bad harvests," see App. IV.) the non-existence of Diets, Gun-Kuwai, was already kept in view.—The assembly question is at present arranged as follows: For the Empire a parliament is pledged for the year 1890; for the three chief towns (Fu) and the provinces (Ken) the Fu-Ken-Kuwai were formed by a decree of July 1878; in the three Fu and in Kanagawa-Ken, where there are several townships (Ku) together with several counties (Gun) there was constituted in addition, by Decree No 8 of February 1881, an Assembly of the collective townships, "Ku-bu-Kuwai," and a similar one of the collective counties, "Gun-bu-Kuwai." By the "Ku-Choson-Kuwai" law of May 1884 there were instituted for the townships

The Daijokuwan may decide, when required by the provincial representatives, on the spending of the state land tax fund.

The County land tax relief funds should only serve for the purpose of covering arrears in the land tax for the benefit of the state, but the provincial and central funds will also cover arrears indeed in case the county funds fail, but will principally assist in cases of the above mentioned calamities, in so far as help is necessary to keep those taxpayers solvent and capable of continued productive work.

The money belonging to these different funds should be invested in interest bearing government bonds. In a future work I propose to discuss what other methods of investing these funds for the benefit of agriculture are still desirable and what banking facilities for the same purpose should be introduced by the State in Japan.

There are therefore two remedies, viz, payment of taxes by *monthly instalments* and *land tax relief funds* for diminishing the pressure of the land tax. But if the Relief Fund is not to become a fresh burden on the peasant, the contribution to the same must not be an addition to the present Land Tax, but a deduction from it. That is to say, the state, conscious of securing thereby a uniform annual income in bad years as in

(Ku), the parishes (Cho), the villages (Son) representative assemblies (Kuwai), which are chosen by the inhabitants (with special clauses for the three Fu and the five open ports).—Gun-Kuwai, County Diets, do not yet exist either.

good, and without discontent to the peasantry, must be willing to make every year a small deduction from the land-tax income. If, for instance, we suppose as above that the reserve fund is endowed with 10% of the land tax, then, on the basis of the land tax estimates for the coming present year (1879) which stay at 40,373,935 yen, the net income of the Treasury would be diminished by more than 4 millions yen. What will make this good? This question I answer by proposing a monopoly of sake.

§ 2.

Land-Tax in kind and in Money.

The Japanese finance authorities have shrunk from rigidly carrying out a system of money payments, and have by way of option practically allowed one half to be paid in kind.* I consider that the idea which forms the basis of this measure is altogether a correct one. It relieves one half of the pressure which compels the farmers to bring their corn to the market all at once; consequently market prices are not quite so much depreciated, the farmer receives more money from the dealers, and can more easily pay his tax.

All the same, we must raise two objections:

1.—In dear years the farmer will as a rule make no

*) *Later addition.* Only for the tax on rice-land. By the reform act, when payment is thus made in kind, the rice is taken at the average price fixed for the market town in question. In case a taxpayer wishes to take advantage of this he must always give notice before the 31st. December of the year previous to that in which payments are to be made.

use of the permission to pay one half of his tax in rice to be taken at a fixed average valuation; because he receives more than the valuation price for his rice. But in cheap years he will pay in kind. Hence we get again a varying element in the budget estimates, for in cheap years the Treasury will not receive as much as had been reckoned upon. This deficiency might be avoided, if the farmer instead of paying for one year only in kind, were to give notice of his intention to do so for a number of years. In this succession of years rice would obtain its average price. But even so the element of uncertainty in the estimates of any one year could not be avoided. This could only be done if a means could be discovered of always disposing of the rice at the same average price. With this view I have made the proposals contained in the following paragraph which deals with the Land-Tax in kind.

2.—Even the half which is paid in money, amounts to a dangerously great sum. For as a fact the Japanese Land tax is out of all proportion higher than it is in any other civilized state.

Let us reckon the Land Tax by percentages of the net proceeds of agriculture. The Japanese Land Tax leaves 7% for interest on the value of the Land, and amounts to 3% for Imperial and Local Taxes together; hence, before deducting the taxes, the net proceed is 10% of the value of the soil. If we set this net proceed at 100, the land-tax amounts to 30. Now let us proceed to a comparison.*

*) Rau. "Grundsätze der Finanzwissenschaft." 5th Ed. §§ 315 and 337.

The Land Tax amounted to...% of the net proceeds
on land :

In	30	% of the net proceeds assessed
Japan, 1878,		
England,* 1693—1798	16 ¹ / ₄	" " " " " "
Austria, 1857	16	" " " " " "
Belgium, 1859	11	" " " " " "
" "	9	" " " " " actual
Saxony, 1858-1860	9	" " " " " assessed
Baden	8	" " " " " "
Württemberg	7 ¹ / ₄	" " " " " "
Hannover, before 1866	11	" " " " " "
" " "	8 ¹ / ₃	" " " " " actual
France (since 1790)	20	" " " " " assessed
"	6	" " " " " actual
Prussia,† 1865	9 ¹ / ₂	" " " " " assessed
"	4 ¹ / ₆	" " " " " actual

In Japan therefore the proportion of land tax to net proceeds is from double to seven times what it is in the states of civilized Europe. The half tax alone, which in Japan is payable in money, is in its percentage about equal to the heaviest European tax, that in Austria; and from 3 to 4 times as high as that in Prussia. If we could compare the proportions of land tax to gross produce the comparison would be still more unfavourable. Let us however compare them in the case of Prussia at all events; for here we have the materials.

We assume that in Japan the average gross produce is 11·765% of the assessed value of the land.‡ Our

*) Land tax in part redeemed since 1798, in part much reduced.

†) Cf. E. Engel, Zeitschrift d. K. Preuss. Stat. Bur. 1867. pp. 153 and 154.

‡) General Le Gendre reckons it at 11·65%. See his "Progressive Japan, a study of the political and social needs of the Empire"—New York and Yokohama 1878. p. 218.

opinion differs from General Le Gendre's in that we consider both the Imperial Land tax at $2\frac{1}{2}\%$, and the Provincial Land tax at $\frac{1}{2}\%$, making a total of 3% of the assessed market value of the estate, as being the burden on the soil.

Hence the burdens on the soil are to the gross produce as 3 to 11.765, i.e. in Japan the burdens on the soil amount to 25.5% of the gross produce. In Prussia, as shown by Engel, it is only 0.842% of the gross produce i.e. in Japan it is 30 times greater than it is in Prussia.

To exact a strictly money payment of even one half of such a high land tax in a country where the money circulation of and the opportunities for transport and disposal are so limited as they are in Japan, brings with it many dangers. I do not mean the discontents of the peasants and their consequent disaffection, but the economically pernicious results, which have not yet perhaps shown themselves unmistakeably in Japan on account of the short time which has elapsed since the introduction of the money land tax, but which cannot fail to show themselves in the long run, even in case of only half payment in money, as they have done in other similarly circumstanced countries, e.g. in India.

The relations of India and Japan in respect to the Land tax, may be very well compared. Both of them are principally rice producing countries with agricultural systems rather intensive than extensive, both are favoured

in climate and soil; in both the state takes so great a part of the produce that this forms the chief income of the state.

Land Tax.	Total Revenue.	Proportion Land Tax to Revenue.
In India* 1863.. £ 19,570,147.	£ 45,143,752.	43.4
1864.. „ 20,303,423.	„ 44,613,032.	45.5
1865.. „ 20,095,001.	„ 45,652,897.	47.0
		Average 44.3.
In Japan, Land Tax, Imperial alone : 1878. yen. 40,373,935.	Y. . 53,275,926.	75.8

In respect of the amount of the Land Tax Japan compares better with India than with Prussia where in 1878-9 the Land Tax (40,208,000 Marks) only amounted to 6% of the Total Revenue (671,592,116 marks) whereas in India it amounted to 44% and in Japan to 76%. And in this we have left out of calculation the Provincial Land Taxes with their income of over 8 million yen. The money portion of the Japanese Imperial Land Tax, considered by itself, alone bears almost the same proportion to the revenue that the whole of the Land Tax bears in India. The consequences of this system will be almost the same as in India. Let us see what these are.

In an English paper on India which is very largely drawn from official sources we read as follows:†

*) G. A. v. Klöden, Handbuch der Erdkunde. Berlin 1877. Vol IV. pp. 465 and 466.

†) The people of India. By Florence Nightingale. Nineteenth Century. August, 1878.

“Year by year the little independence that is left to the ryots is gradually passing away; and if nothing is done to stop the process, in a few years the whole body of the cultivators will be reduced to the position of mere labourers. The undue pressure of the land assessment has something to do with this. It is almost out of the question for the cultivators to turn produce into silver without the money-lenders. Some collectors think it would be wise to allow the ryots the option of paying their rents in kind, as in former times. By no other means I fear, can the power of the money-lenders be broken.

“If an administration may have unwittingly brought an ignorant peasantry into such a state as this by requiring an assessment to be not in kind but in money, it being utterly impossible for the cultivator to get coin except through the money-lender, &c.

“If it is true that a rate of 36,40,50,60, or even 100, or 200, or 300 per cent, is not a more uncommon rate of interest in the interior of India, as exacted from country ryots by money-lenders, than a rate of 3½, 4, 5,6, or 10 per cent, at most, is in England, is the greater fear that of the conquest of India by the Russian or of the conquest of India by the money-lender?

“The bulk of the people of India are paupers. They can just pay their taxes in a good year, and fail altogether when the season is bad. Remissions have to be made perhaps every third year in most districts. There is a bad year in some one district or group of

districts every year.”...“Whose striking words are these? Not those of a member of Parliament or advocate making a case, or historian or gazetteer writing in his closet. They are those of one of our great English pro-consuls ruling in India over a population nearly twice as large as that of France—second only to a viceroy, and who has done perhaps more than any in raising the Indian peasant, in giving him a kind of representation, a voice to rate himself, in giving him education, roads, and a sort of independence or power to hold his own.

“How is it that whole peoples among the most industrious in the world, on perhaps the most fertile soils in the world, are the poorest in the world—how is it that whole peoples, always in a state of semi-starvation, are from time to time on the brink of famine?” (Page 200.)

To these eloquent words which show how pernicious has been the effect in India of a high money-land tax, not of course as a sole cause but surely as a chief cause amongst other causes, and which also find a partial amelioration in an optional return to payments in kind, I would like to add the remark that *when there is a high land tax it is absolutely essential to keep the laws against usury rigidly in force.*

But we must remember that the Japanese law against usury allows interests of 12%, 15%, 20%, whereas the net produce of the farmers was valued at 6% before the 4th January 1877 and at 7% after that date.* Let us

*) *Addendum.* We point to the datum for the 1% reduction of the Imperial and Provincial Land Tax together. According to the Imperial Decree

be quite clear about the meaning of these figures. We showed above that if the gross income of an average year be taken as 100, then 59,5 parts of it are free to pay the interest on the money value of the soil, but in bad years only 34,5 parts are available i.e. if in the average years according to the valuation of the finance department 7% represents the interest on capital, in bad years the interest stands only at 4%, as 59,5 stands to 34,5 as 7 to 4. Let us take an example: A landowner has a property worth 500 yen, its net produce according to the tax assessment is 35 yen. He hears how he might increase the value of his land very much by pasturing cattle on his moorland, and borrows 200 yen at 15% to buy cattle with. He reckons on a much higher profit than 15%. But he is unfortunate. One of the numerous cattle diseases known also in Japan attacks his cattle; it dies, he has no further profit from it and is burdened with the debt. Or let us suppose that a fire or a flood have brought him 200 yen into debt; he must pay 30 yen interest every year; then there remains 5 yen for his own necessary use, if he can manage with that. But a bad year comes, in which the net produce is only 4%, i.e. on his property only 20 yen. On our

of 28. July 1873, the Imperial Land Tax amounted to 3% of the value of the land, and for the Local Land Tax an addition of one third, that is of 1% of the price of the land was allowed, but by the Imp. Decree of 4. Jan. 1877, an alleviation was effected. From this time the Imp. Land Tax amounted to $2\frac{1}{3}$ % of the value of the soil, and for the Local Land Tax an addition of one fifth, i.e. of $\frac{1}{5}$ % of the price of the land was allowed.—But already in 1880 the limit of the allowable addition was again altered, and then fixed at $\frac{1}{3}$ of the Imperial Land Tax “as a maximum.”

former supposition he wants 5 yen for himself, the remaining 15 will only pay half of his interest and he is consequently in the hands of his creditor to whom he now owes 215 yen, or what ever sum the creditor is pleased to ask for the prolongation of the debt, be it 250 or 300 yen. The man is severely injured by the one bad year. He can scarcely hope to get rid of the debt, for the land tax takes from him all means of saving, and even in good years he can only just meet his engagements. In the course of years such failures come again and again, the burden is ever becoming heavier and he probably ends by losing all his property. The same high land tax which before hindered him from saving enough to protect him against possible accidents, savings which would have quite done away with the necessity of borrowing, now prevents him from becoming quite free from his debt.*

I believe that in my reference to India and in the foregoing example so suitable to the state of affairs in Japan, I have shown that in Japan also there is a certain danger, even if the usury prohibition laws were strictly observed, and even if payments in kind were optionally permitted, that the high land tax would, as in India, gradually wrench the land from the farmers and transfer it to the money lenders. Moreover from the

*) Let me remark here as a note, that fire-insurance, cattle-insurance, bad weather insurance, &c, are also means for protecting the agriculturist against the necessity of borrowing money. They are kinds of Savings Boxes with contributions in good times to meet certain calamities.

European statistics given above one can see that the burden on the soil in Japan is too heavy, is far too heavy.

The Japanese government itself has already recognized this fact in the decree of 1873, which gave the assurance that as soon as the state of the finances permitted, the land tax should be lowered by 1%. But as it seems to me that, in the pressure of present financial difficulties, the question of a reduction in the land tax has been put very much in the back ground, I wish in a following paragraph to show more clearly the loss which Japan's wealth sustains from an excessive land tax. I do this not without purpose; for, in the first place, I shall also mention some partial remedies, and secondly, in the latter part of this paper of mine, I shall inquire into the sake manufacture and sake tax defraudations and shall point out in the government monopoly of sake a complete remedy for the evil.

§ 3.

Ways of utilizing the Portion of the Land Tax Paid in Kind.

The taxes paid in kind may be disposed of as follows :

1. By sale at current market prices ;
2. By export ;
3. For paying official salaries ;
4. For storing against bad years ;
5. For rice subscriptions ;
6. For government sake manufacture.

No 1. and No 2 are alone in use now, No 3 and No 4

were formerly in use but are now obsolete, No 5 and No 6 are propositions first made by myself.

The ways of spending indicated by No 1 and No 2, which are now alone in use, seem to me to be less commendable than those in No 3. 4. 5. and 6.

According to the principle that the state ought, if possible, to give preference to uniformly high or uniformly increasing, rather than to varying profits, according to this principle we repeat, the ways of utilizing indicated in numbers 3-6, which always bring in a uniform income are to be preferred to the selling at the current market prices and to exportation, both of which vis à vis the average price of rice assessed for the payments in kind would sometimes bring profit sometimes loss, but always varying profits. Only if the methods of utilizing, mentioned in numbers 3 to 6 should leave still leave a surplus of rice—a very unlikely case—only then are Nos 1 and 2 to be preferred vis à vis the chance of an excessive storage of grain.

Ad. 3) Concerning the official salaries I will quote Rau “First Principles of the Science of Finance,” § 59:

“In olden days a great part of a man's salary was paid in kind and this was to the point because in those times fewer manufactured necessities were required, the markets were less lively and the circulation of money less rapid than now-a-days; and also because it was more convenient for the government to collect revenue and meet its obligations in kind, and the persons paid also preferred not having to buy for cash. In modern

times the endeavour to simplify the financial administration and to get rid of the burdensome care of the contributed materials has in most countries been followed by the introduction of payments purely in money, a practice against which some voices have again been raised. A fixed money salary is sufficient when prices are low, insufficient when they are high. The employés ought in cheap years to lay by something for dear ones, but they genexally leave this undone both on account of carelessness and thoughtlessness, and also because they hope that the cheapness will continue. If on the contrary a portion of their salaries is fixed in corn on the basis of an average price derived from many years, it has this advantage to the employés that they do not suffer by the variation of the price of corn; and in that case the government is not obliged to raise the salaries to meet the raised prices, and if Government still receives kind payments, these are disposed of at average prices; hence changes in market prices cause fewer disturbances in finance."

With regard to this Rau reports, that 1819 the people of Bavaria wished to fix a part of the official salaries in kind, that in 1826 (Decree of 16th Feb), in consequence of this wish, part payment in kind was introduced for new appointments. A decree of Jan. 18., 1845 regulated the same affair later on, but on account of the total cessation of payment of revenue in kind, from the year 1850 the new salaries were once more entirely paid in money.

Ad 4) Storing up rice for years of scarcity formerly took place in every Daimiate. After the overthrow of the Tokugawa government the "*Gisoo*" (rice granaries for years of scarcity) fell into decay, and their contents were used for the requirements of the moment. Their falling into disuse and the newly introduced export of rice, which deprived the land of stores of rice, and this too at a time when the population is increasing more rapidly than formerly—these three things together form a real danger. Considered from the humane point of view it is to be hoped that famine will never set in over the land; and from the political point of view, nothing could be so dangerous to the present government as a failure in the harvest and consequent famine; for it would undoubtably be put down by the common people to the disuse of *gisoos* and to the export of rice, even when as a matter of fact the export of rice was much too small to have any such effect. The exportation of rice whether private or official can only be recommended from an economical and political point of view, if care has been taken to provide by means of stores for sufficient quantities of rice.

Let us imagine that, when we speak of an eventual introduction of the *Gisoos* as well as the establishment of a Land Tax Fund in Gun, Ken and State, we mean that the payments in kind delivered into the *gisoos* are made good to the State Treasury out of the Land Tax Fund, so that the *gisoos* would not stand by the side of the Land Tax Fund as an independent institution

but in organic connection with the same, being an investment of its monies. According to this the Land Tax Fund would have three tasks :

1. To prevent famine
2. To guarantee the payment of the Land tax
3. To keep the persons who have to pay the Land tax solvent and in a condition for further productive work.

Ad 5) I propose rice subscriptions. By that I understand the following arrangements. Anyone who is considered likely to continue solvent is allowed to secure to himself the periodical supply of a certain quantity of rice for a series of years, to be delivered from a certain government rice granary, always at the same average price of the locality and granary in question, by becoming a subscriber. He, on his part, undertakes the duty of paying in the corresponding periods the said average price, like *a tax*, to the government receiving office designated to him. If he does not meet his obligations, as, for instance, in a year when the market price of rice is lower, the subscription money is levied exactly *as a tax*, eventually compulsorily. He can only free himself from this duty by transferring the promised payment to another person, if the government authorities in question are satisfied with the other party's assumption of the subscription, considering him also likely to continue solvent. The subscriber receives rice assignments on the government granary in question for the subscription money. These assignments are always due on and after some fixed day.

The rice is deliverable not only to the person of the subscriber but simply to bearer. Thus no government permission is needed for the transfer of the rice assignments. This will be convenient for the subscriber and granary official alike. Thus the rice paid in taxes to the government on the basis of an average price taken for a great number of years, would be turned to account by the subscription payments, each year exactly at that average price. That part of the official salaries which is paid in kind (see 3.) would be handed over to the officials in the same kind of transferable assignments.

Ad 6). The last part of this paper treats of the state manufacture of sake. The rice would always be deliverable to the state sake manufactory at the fixed average price of the delivering government granary.

In the methods mentioned above (3-6) the rice would be sold at the average taken from a number of years, i.e. at the average price of the assessment of the Land tax; and the adoption of this tax in kind would not be followed by the slightest trouble to the state finances.

§ 4.

The excessive Land tax the most essential hindrance
to the economical progress of Japan.

The development of Japan's national economy undoubtedly lies partly in the development of her industrial capabilities and the opening up of her mineral treasures;

and partly, nay, *principally*, in the extension and promotion of her agriculture. I know that I am at one with all thoughtful foreign well-wishers to Japan (of writers on Japan, I will only mention Mounsey, Griffis, du Bousquet, Naumann, and Le Gendre) that the principal and most needed improvement in the system of Japan's National Economy is to be found in the direction of agriculture.

If, now, agriculture is to be extended to any great amount, if the great uncultivated tracts are to be put under the plough, if agricultural implements are to be improved, and if machines are, to a certain extent, to be employed, finally, if the breed of live stock is to be considerably improved, all this can not be brought about only by entirely new farms: a thorough and comprehensive improvement and extension of agriculture on a large scale must have its origin rather in the farmers themselves, upon the basis of their already existing farms. It is indispensable that the farmer should have some savings of his own for those small single improvements, which though insignificant by themselves, yet in their entirety come to enormous sums of money. Thus the necessary preparation for a profitable development of Japanese agriculture is to make the farmer more capable of economizing: an improvement in the *existing* system of agriculture demands as an imperative preliminary condition a diminution of the land tax, so that every farmer may be able to lay by a small capital. If the state only gives the farmer an opportunity of becoming well-to-do under the *existing*

system of agriculture, it has created a means whereby in after years the agricultural treasures of the country will be put out. In still another direction, if agriculture is to thrive and prosper, a diminution, nay a complete exemption from the land tax is necessary. Instead of encouraging improvements, the state does the exact contrary, when it follows upon the heels of improvements or new agricultural undertakings by assessment of taxation. The high land tax thus stamps out any desire to better, to extend, to open up farms. It is then the saddest hindrance to the much needed agricultural development of the country. The government ought to reward and stimulate improvements and new agricultural undertakings by taxing the additional products arising from improvements, only after the lapse of a number of years, and by leaving the net produce of land newly brought under cultivation wholly, or at any rate for the most part, free from taxation for many years. Thus the Prussian Land tax law for the Province of Westphalia Jan 21, 1839, in § 29, ordained that in the following cases there should be temporary exemption from taxation in order to reward cultivation and agricultural improvement: In the case of

- A. the planting of forests or the sowing of waste lands.
- B. the draining of marshes.
- C. the planting of vines and fruit trees.
- D. the laying out of gardens, fields, meadows and pastures.

} Upon soil not under cultivation for 15 years, or on barren lands.

- A freedom from taxation for 30 years.
- B do.....do.....do 25 do.
- C do.....do.....do 20 do.
- D do.....do.....do 10 do.

However, in order to bring about an improvement of agriculture, borrowed capital will have also to be employed. Agricultural credit demands an organization different from that of commercial credit. But of whatever kind the credit organization, which as a fertilizer brings money to agriculture, may be, capitalists will only invest their money in agricultural undertakings when these pay about the same amount of interest as other investments.

Capital invested in Japanese government securities bears about $8\frac{1}{3}\%$ interest, as is seen from the price list table of Japanese government securities, which I gave in my second lecture on the "*Japanese National Debt*," dated October 7th, 1878.

According to the original land-tax assessment, interest to the amount of 6% was allowed on the assessed market price of the real property; the land tax was diminished in Jan. 4th, 1877 by $\frac{1}{2}\%$ state land tax and $\frac{1}{2}\%$ ken land tax. The rate of interest on capital invested in agriculture is 7%. Hence agriculture is *overtaxed* at the very least by $8\frac{1}{3}$ minus 7 i.e. $1\frac{1}{3}\%$ of the selling price of the land. It is admirable how clearly and correctly the Japanese legislators recognized, as far back as 1878, how much agriculture is overtaxed, and by how much it ought to be relieved. As far back

as 1873, the government in a public manifesto announced its intention of diminishing the land tax by degrees, circumstances permitting, to 1% on the selling price of the real property. What is meant by the 1% is the Imperial land tax, apart from the local ken land tax. This Imperial land tax amounts now to $2\frac{1}{2}\%$ on the selling price, the intended further diminution of $1\frac{1}{2}\%$ comes surprisingly near the figure worked out above by myself, viz. $1\frac{1}{3}\%$.

§ 5.

Equalization by means of taxes on non-agricultural income.

I should not fully serve my ends viz. the promotion of agriculture, were I not, in connection with this equalization of the proceeds of interest on the different kinds of investments, to call the reader's attention to the following point.

The equalization of the proceeds of interest from land, 7% and from other safe investments, $8\frac{1}{3}\%$, can be carried out, not only by increasing the 7 per cent profit to $8\frac{1}{3}$ by a corresponding diminution of the land tax, but also in another way, by the subtraction of $1\frac{1}{3}$ from the $8\frac{1}{3}\%$ profit by a correspondingly increased taxation on all other sources of income, and all other profitable investments.* In other words, taxation which

*) *Later addition.* The fact that the rate of interest on capital invested in Japanese government securities has gone down to 5% since 1886, is of great benefit to agriculture.

does not affect the farmer and which falls upon the other part of the population as, house-taxes, trade licenses, taxes on interest or capital, income taxes or whatever all these may be called in the European methods of taxing the incomes of citizens which arise from the profitable investment of property, and which reduce the income for the benefit of the state—all these make agriculture more capable of attracting capital by means of a just equalization, strengthen its credit, and hence make it capable of greater production. For, in this case, capitalists will no longer shun investing their capital in agriculture and will no longer favour other modes of investment, but will invest their money in it as readily as in other securities.

The equalization of 7 and $8\frac{1}{2}$ could lastly be brought about in many other ways, as, for instance, by adding $\frac{1}{3}$ to the 7, and subtracting $\frac{2}{3}$ from the $8\frac{1}{2}$, so as to bring both items to $7\frac{2}{3}$; i.e. there could be a further diminution of the land tax by $\frac{2}{3}\%$ of the assessed selling price of the real property, and an addition of $\frac{1}{3}\%$ to the taxes on other kinds of income profitably invested. This as well as other similar combinations would work in an equalizing, and consequently useful manner. The fact that the Japanese land tax occupies a *disproportionately high* position in comparison with the other sources of revenue and taxes, follows also from the table of comparison given below, which I take from *Rau's Grundsätzen der Finanzwissenschaft*, 1885, Vol II, p. 10, as far as it concerns other states.

Rau divides taxes into 3 divisions (1) *duties or fees* (*Gebühren*) (2) *assessed or direct taxes* (*Schatzungen*) and (3) *indirect taxes or taxes on articles of consumption*. He says :

“Duties or fees are levied in cases when the individual citizen comes into a certain special connection with an official or a government institution. They may be considered as a kind of special compensation for the expense which the State authorities incur from any cause whatever, and thus have some resemblance to the payment for service rendered in private cases.” (Rau § 227). Rau mentions *inter alia* the following *as duties or fees* (*Gebühren*) : (1) stamp duties (2) official promotion fees, (3) court fees, (4) duties on the conveyance of land and on other contracts, (5) on donations, (6) on legacies, (7) fines, (8) fees, (9) water rates, (10) tolls, (11) boat tolls, (12) fees for trade licences, and patents, (13) school fees, &c.

In § 262 Rau explains the distinction between assessed or direct taxes (*Schatzungun*) and indirect taxes, or taxes on articles of consumption (*Aufwandssteuern*). He says :

“If we observe the manner in which taxes can be organized according to the citizen’s capability of payment, and how for this purpose they can be attached to certain objects, then the following two methods result :

1. We can find out the total of each individual’s means or income, can estimate his capacity of paying taxes, and afterward demand from him a certain per-

centage of his taxable income or means. In this case we are concerned with *persons* upon whom a certain yearly obligation of paying taxes is imposed, and we must take the trouble of making the income of each citizen the object of a careful investigation.....Such taxes can be designated *assessed or direct taxes* (Schätzungen).

2. We can infer the amount of a person's income by the manner in which he employs it, and hence base taxation upon the *expenditure* of the taxpayers..... Taxes of this nature we generally call *indirect taxes or taxes on articles of consumption* (Verbrauchs-, Verzehrun- und Consumptionssteuern). A still more characteristic name would be *expense taxes* (Aufwandssteuern)" In § 294 he remarks: "It has become the custom to call taxes on articles of consumption (Aufwandssteuern) *indirect taxes*, and assessed taxes (Schatzungen) *direct taxes*."

As *assessed taxes* (Schatzungen) Rau mentions the following *inter alia*: (1) Land tax, (2) House tax, (3) Trade licences, (4) Interest or capital taxes, (5) Poll tax, (6) Income or property tax: and as *taxes on articles of consumption* (Aufwandssteuern) *inter alia*: taxes on dwellings, dogs, horses, vehicles, servants, the excise duties (octroi dues, flour and slaughterhouse taxes, wine beer and spirit duties, duty on tobacco, beetroot sugar duties, government stamps on cards, almanacs, newspapers) and custom duties.

In order to effect a comparison with Rau's figures

we will follow his tax-classification, and will arrange the Japanese figure, from the budget of 1877²¹, according to his method.

Thus we find the sum of the *assessed or direct taxes* (Schatzungen) to be 41,695,195, yen, out of which 40,373.935 yen or 96.83 % is Land tax. The sum total of *assessed or direct taxes and taxes on articles of consumption or indirect taxes together* we find to be 47.557,592 yen out of which 84.89 % is Land tax.

From this we get the following Table :

Percentage of the Land tax.		
In	1. From direct taxation alone	2. From direct and indirect taxation together
Japan*	97 %	85 %
Spain	76 „	40 „
Bavaria... ..	69 „	29 „
France	59 „	29 „
Austria	44 „	28 „
Belgium	53 „	25 „
Württemberg	57 „	25 „
Prussia	38 „	18 „
Baden	45 „	16 „

*) *Later addition.* Worked out according to the same method the Land tax in 1883 amounted to 96.37% and in 1887 to 95.84% of the direct taxation (Schatzungen) alone; and in 1883 to 66.16% and in 1887, to 66.37% of direct and indirect taxes together. To find this I have made use of the financial accounts of the real income and expenditure for 1883, and the estimates for 1887, in some unimportant

Ad 1.) *Percentage of the Landtax with regard to direct taxation alone.*—European States derive about as much revenue from *other* assessed or direct taxes as they do from the Land tax. In France the Land tax is to the other direct taxes as 59 to 41; in Austria as 44 to 56; in Prussia as 38 to 62; but in Japan as 97 to 3. In Japan all the other assessed or direct taxes together only amount to $\frac{1}{32}$ of the Land tax. Does the total value of the produce of the soil compared with the total value of the produce of industries justify this proportion? The statistics published by the Finance Ministry quoted in General Le Gendre's *Progressive Japan* (p. 293), give a negative answer to this question. According to these statistics the total value of the produce of agriculture and forestry together amounted to about 269 million yen, as against 159 $\frac{1}{2}$ million yen, the value of the produce of fisheries, manufactures, and mines. From this it would appear that the Land tax in Japan in order to be in about the same proportion to the other direct taxes should be as 63 is to 37.

Ad 2.) *Percentage of the Landtax with regard to assessed taxes and taxes on articles of consumption together.* European states derive about 2 to 3 tenths of their revenue from taxes on land, Japan, however, derives from 8 to 9 tenths

items helping myself by probable assumptions. The greatly changed position of the Land tax with regard to the taxes on articles of consumption (*Aufwandssteuern*) comes from the great increase of the taxes on *sake* and tobacco, and the introduction of new taxes on drugs, shoyu and confectioneries.

The proof of my calculations follows on next page.

Table to the note on p. p. 250 and 251.	18 7 $\frac{1}{2}$ (Budget.)	18 8 $\frac{1}{2}$ (Financial Accounts.)	18 8 $\frac{1}{2}$ (Budget.)
Assessed or direct taxes.	Yen.	Yen.	Yen.
Landtax	40,373,935	43,342,188	42,559,441
Rent of lands in the treaty ports ?	83,884	83,884?	83,884
Tax of Liu-Kiu-Han	45,054	—	—
Tax on official salaries	81,992	—	—
<i>Taxes on trades</i>			
Mines (for 8 $\frac{1}{2}$ "rents of mines?")	10,346	18,806	18,205
Ships	132,989	135,219	241,037
Vehicles.. .. .	236,729	453,869	485,305
Trade guilds.. .. .	300,987	435,914	—
Banks	—	—	221,850
Rice Exchanges	—	—	264,824
Stock Exchanges.. .. .	—	—	49,320
Horse and cattle dealers	61,653	87,720	67,141
Druggists	54,446?	54,446?	54,446
Sake manufactories	304,680?	304,680?	304,680
Koji dealers	—	47,200	27,810
Lawyers	8,500	10,270	—
Other licences	—	—	26,582
Sum total of assessed taxes.	41,695,195	44,974,256	44,404,525
Taxes on articles of consumption.	Yen.	Yen.	Yen.
Customs	1,933,739	2,613,291	2,704,553
Tax on the produce of the Northern provinces	382,509	864,712	200,000
Sake duty (but minus the duty on sake manufactories).. .. .	3,197,475	16,024,944	13,393,043
Tobacco duty	348,674	280,849	1,244,002
Duty on drugs (but minus that on the manufacture of drugs)	—	310,496	360,770
Duty on Shoyu	—	—	1,273,210
Duty on Confectionery	—	—	543,925
Sum total of taxes on articles of consumption.	5,862,397	20,094,292	19,719,503

from the same source. The following changes in the method of taxation might work a great change for the better on the disproportions we have demonstrated :

1. The alteration of the direct taxation ratio already demanded by us ;
2. In the duties on articles of consumption an increase of import duties ; a thing which is also desirable for other economical reasons ;
3. An increase of taxation especially on Sake.

In order to prevent any misunderstanding I mention here that the additional revenue from sake is best obtained, not by raising the rate of the present duty upon it, but by a state monopoly of sake-manufacture without raising its present prices.

For the sake of completeness, I ought here to add that the equalization of the unduly insufficient interest on capital invested in agriculture could also be brought about by the increased income from other taxes. Any discussion in this treatise beyond the above brief remarks on the benefit or injury, feasibility or impracticability, profitableness or expensiveness, advantages or disadvantages of indirect taxation as compared with direct taxes, for Japan, would be premature. Every one of these forms of taxation would require its own detailed treatment.



IV.

THE SYSTEM

OF THE

AGRICULTURAL DISTRESS FUNDS

IN

JAPAN.

(1888.)

I.

Concerning the history of the Agricultural Distress Fund.

The early history of the Agricultural Distress Fund now introduced into Japan, can be traced back through the Middle ages of Japan to the remotest history of China; other roots of this system extend as far as Europe, especially into France, Westphalia and the Rhine provinces of Prussia; during the first decade of the present government Japanese legislators repeatedly treated the subject of agricultural relief in a fragmentary manner till at length these different component parts were consolidated in the Law of June, 1880, which is still in force.

From time immemorial measures of relief in case of agricultural distress were closely connected with government granaries in *China* and *Japan*, and thus we see even the present institution influenced by it. The institution was introduced from China to Japan.

Classifying them by their objects, we can distinguish between five kinds of public rice granaries in *China*, that is to say, including barley and millet, five kinds of public corn granaries:

1. For the reception of the rice tax paid in kind.
2. The transport granaries needed for the transport of this tax in kind from one province to another or to the capital.
3. The granaries for steadying prices, which are to be filled by *buying* rice in *cheap* years, and to be emptied by *selling* it in dearer ones. They

serve the national policy of influencing the course of prices; they are meant to raise the prices in cheap years for the benefit of the rice grower, and to lower them in dear ones for the benefit of the consumer.

4. The *village* relief granaries, which are to be filled by levying an additional tax in kind on the rich harvests of country people, *in proportion to the crop surplus*, and serve to relieve famishing villagers after a failure of the harvest.*
5. The *district* relief granaries which are to be filled by taxes in kind, and which complement the system of village granaries.†

The *rice tax granaries* (1) must have existed ever since there has been a rice tax, from the very earliest ages, that is; the *transport granaries* (2) are mentioned as existing as far back as 57-54 B. C.;‡ the *rice granaries for steadying prices* were founded at the same time,§ and from that time on for *nearly 2000 years*, in spite of all changes of dynasty have been applied to their magnifi-

* So according to *Leon d' Hervey-Saint-Denys*' "Recherches sur l'agriculture des Chinois et sur les végétaux, les animaux et les procédés agricoles que l'on pourrait introduire avec avantage dans l'Europe occidentale et le nord de l'Afrique, suivies d'une analyse de la grande Encyclopédie *Chéou chi thong khao*" (Paris. Allouard et Kaepelin. 1850, p. 247.)

† Saint Denys erroneously regards the 3rd and 5th kinds of granaries as *one*.

‡ In the transport of 4,000,000 koku of rice by 60,000 men to the capital. *S. Matwanlin's* "Gelehrtes Lexicon," Jap. "*Bunken tsuu ko*" Vol. 21, p. 3.

§ At the instance of the vice minister for agriculture, when the farmers were suffering on account of the low price of rice ("5 sen per koku") arising from an exceedingly plentiful harvest. *S. Matwanlin*, "Gelehrtes Lexicon," see above.

cently conceived benevolent purpose of minimizing fluctuations and, in spite of the varying results of the harvest, of guaranteeing a certain average price to that product which chiefly regulates and controls the price of all other products and wares. The problem of preserving to money the same power of buying, a problem which mono- and bi-metallists are nowadays trying to solve under our economic conditions, was undertaken in China from the side of the chief article of commerce. In this wise institution for the equalization of the price of rice, we see one of the chief reasons of the economic prosperity of China.* Its great use was

*) The method of equalizing the price of *bread* introduced by Napoléon III for Paris is the European equivalent for the Chinese method of equalizing the price of *rice*. In France money, in China agricultural produce, in France corn, which still demands the middlemen the miller and the baker, in China rice, which is used without further preparation, these are outward differences which cannot prevent us from seeing the internal resemblance of the two methods: "In the year 1854..... a *Caisse de service de la boulangerie* was founded; this was in reality a compulsory Savings-bank into which the bakers paid a certain percentage of their profits in cheap years, and from which they were compensated for losses arising from the fixture of the price of bread in dear ones. Thus it was that in the dear years 1854, 55 and 56 the population of Paris hardly suffered at all, since the Treasury paid to the bakers during this time contributions of not less than fr. 55,000,000, a sum which it gradually re-collected (Compare, *Jollos: The Breadtariff in Paris*, Schmollers Jahrbuch for Law, Administration and National Economy, 9th year 1885; and *Kurt von Rohrscheidt: The Breadtariffs and the Weightbakery*, Conrad's Jahrbuch for National Economics and Statistics, New Series XV, number 6). The establishment in Paris of a steadying of bread prices, which was practically proved to be of value, was sacrificed to two Molochs (1) the Manchester theory, and (2) the narrow-minded evasion of a State duty which China had recognized for 2000 years. Rouher, indeed, stated emphatically in his Report to the Emperor Napoleon III, in the year 1863 "that the people would, if the government claimed the authority to tax bread, imagine it to be its duty always to keep it cheap. Such a guarantee, however, the State might not be in a position to give."

soon evident to the Japanese government. The Emperor *Junjin Tenno*, who reigned from A. D. 759 to 764, was the first to introduce into Japan the rice granaries for steadying prices (Jap.: “Joheisoo”), and we find this method of price regulation in practice for at least 200 years. Its application is expressly mentioned in Japanese History for the years 765, 773, 867, 878, and 957.* During the time of the warlike Middle Ages and of the luxuriant growth of feudalism, the State rice granaries disappear,† and I find no further mention of the application of the steadying of the prices from sales from such rice granaries.

In spite of his desire to render assistance Godaigo Tenno finds himself compelled during a famine in 1321 to content himself with the poor expedient of exhorting the well-to-do to sell their stores of rice to the poor. The present government were the first to consider the re-establishment of the old method which worked so well in former times. A Bureau for the steadying of

Recent times have brought a new solution of the old problem viz. by means of facilitated *communications* and *municipal bakeries*.

*) I will give further particulars in my future work concerning Japanese famines.

†) Princes Mori, Shimadsu, Nabeshima, and Yamanouchi when they gave up their domains of Chōshiu, Satsuma, Hizen, and Tosa to H. I. M. the Emperor in their common memorial make this one of their reproaches against the forefathers of living feudal lords, “that these latter had in former times made themselves masters of the imperial storehouses and their contents by force.” Cf. John H. Gubbins' Translation of the Memorial, Parliamentary Papers, C—3832, p. 93 et seq.

the price of rice* was again created in the Ministry of Finance by the decrees of January 1877 (No 4 B.) and June 1878 (No 27 B.), but it was abandoned again by the decree of November 1882 (No 43). From November 1882 the Central Agricultural Distress Fund devoted itself in investing its property to buying and selling rice; following the example of the Provincial Distress funds which had done this from their commencement in January 1881. We shall further have to discuss the results of this grain business of the Agricultural Distress fund by an investigation into the administration of its property.

The Village Relief Granaries (4), according to *Matwanlin* and the *Agricultural Encyclopedia*, were introduced into *China* in A. D. 583.† The method of filling these granaries appears to have changed in later times. Under the Sui dynasty (589-618) the utmost one family had to pay was one koku of barley or millet yearly. It was

* Cf. *Hookiteiyo*, (Compilation of Japanese laws) published in april 1887 by the *Hooseikiyoku* (Bureau Legislative) p. p. 116 and 117 concerning the formation and abolition of the "*Johseikiyoku*."—It so happened that in 878 exactly 1000 years previously a special office for the steadying of the price of rice "*Johei-shi*" was founded under Yōzei-Tenno.

† For the same year *Matwanlin* (ibid. p. p. 4 and 5) makes a more detailed mention of granaries for the rice tax in one province, for the steadying of prices in another, and for the transport of rice in the third, in each case giving the name of the province.—*Saint-Denys* misunderstands his source, the *Encyclopedia* of farming and gardening, when he fixes the first foundation of corn granaries in the same year 583 (the 3rd year of the period *khai-hoang*). These granaries, indeed, he calls Public Aid granaries (*Greniers d'assistance publique*), but he ascribes to them only the identical functions of the price steadying granaries. As we remarked above the first foundation of price steadying granaries falls about 620 years sooner.

during the Tang dynasty (618-907) that the *size* of the landed property was first taken as the scale by which the tax should be reckoned, so that 2 sho (about 3.6 liter) had to be paid for $\frac{1}{10}$ tan (about 1 Ar). When the harvests were 40% below the average in the official crop registers (Jap.: "Seibiobo"), half the contribution, and when 70% below, the whole contribution was remitted. Persons not owning landed property were divided into 9 classes. The lowest class, as well as foreign immigrants, were excused from contributing, the other 8 classes had to pay from 5 To to 5 Koku (90 to 900 liter). In bad years, the grain was given out in relief, or lent for sowing purposes; in the latter case it had to be paid back in autumn.*

The above mentioned description by Saint-Denys of the method of filling the "*greniers des villages*" from the surplus of crops has reference, I think, to a later time.

The 'Gisoos,' relief granaries, (lit. rice granaries of general philanthropy) are the *Japanese* equivalent of the Chinese village relief granaries. When they were first introduced into Japan I cannot say. At the time of

*) I take these remarks from the 56th book of the above-quoted large Chinese Encyclopedia of farming and gardening. The Chinese title is "*Cheou chi thong khao*," and the Japanese "Diuzi tsūko," Engl. "Time studies." This book was published in the year 1737 by the order of the Emperor Kienlung in Pekin and contains 78 volumes. Mr. T. Saito has been kind enough to look through this book for me. Saint-Denys in his report makes no mention of the matter in the text. He only makes the remark that in China certain official prescriptions regulate the number of public granaries in proportion to the extent of the province, and also the quantity of grain to be stored in them in proportion to the population of the region in question.

the Restoration of 1868 they were in existence, but fell into disuse soon after the compulsory payment of rice being given up. To what extent they existed, and whether their stores of rice also passed into the hands of the state when the daimiates (Han) were dissolved I was unable to discover. Thus far no historical accounts of the working of these '*Gisoos*' have come under my notice.

The District Relief granaries (5) were (according to the Agricultural Encyclopedia, Book 56) first introduced into *China* under the Sui dynasty in A. D. 585, i.e. two years only after the foundation of the village relief granaries, and apparently as a systematic complement of these latter. By a decree of the year 586 they were to be *filled* by a tax in kind. For this end the people were divided into 3 classes; the maximum yearly payment of the first class was one *koku*, of the second 7, and the third 4 to. These granaries *lent* rice in bad years, which was to be paid back within a year at the very latest. A part of their store of rice ("that in the third granary") was only to be touched in years of the greatest famine, and in that case had only to serve the purpose of supporting the agricultural population in the most needy places.

I have not been able to establish the existence in Japan of any particular kind of granary corresponding to these District-relief-granaries.

The extension of the rice granaries system in China may be gathered from a statistical notice of Matwanlin's for

more remote times. According to his Lexicon, Vol. 31. p. 6-7, the following quantities of rice were stored in the government granaries in 749 under the Tang dynasty:

In the tax granaries	42,126,184 Koku of rice
„ „ village Relief granaries	63,177,660 „ „
„ those for the steadying of prices	4,602,220 „ „

Whenever in Japanese *history* mention is made of the distribution of rice for the support of the people, the Reserve rice granaries (“Jobisoo”), which serve as aid in times of famine, always belong to the ruler “the government;” in the most ancient times they belonged to the Emperor, in feudal times to the Shogun, and the Daimiyos. Hence, during famines we again and again find the following report: “The government opened its reserve rice granaries and doled out rice to the people.” Thus, for instance, the Emperor relieved the people in the years 849, 851, and 858,* in the same century that we saw the method of price steadying in practice; and thus in later times the Tokugawa Shoguns did the same in the Emperor’s name, as, for instance, in 1681, 1701, 1784 and 1788. The Japanese reserve rice granaries seem to have been filled only by the retention of *rice paid in taxes*, thus not resembling the Chinese ones which were filled by an additional tax in kind in particularly good years. When in the seventh lunar month† of the

*) In 858 the offices for the distribution were called “Kokuso-In” (corn granary office) and “Minbu-Rin-In” (rice granary office).

†) The Gregorian calendar was first adopted on Jan. 1., 1873.

year 1871, the Daimiates (Han) were dissolved, their rice granaries were also given up, and their contents to the value of about $1\frac{1}{2}$ million yen were turned into the state Treasury.* In the very last years before their abolition they had had to satisfy great claims in consequence of two very bad harvests, viz. in 1868 and 1869.— This brings us to the treatment of Agricultural Distress in the Meiji period.

Immediately after the warlike events of the Restoration, was published the first decree of June, 1868, which ordains that the relief of persons injured by *conflagration caused by the war* was to be left to the different provinces. This meant that the provinces might take that relief upon themselves or not. These injuries are thus not yet recognised as a national affair. In opposition to this the distress of the country people “from chance misfortunes,” thus including that caused by war as well as that arising

*) Cf. the Report of *Okuma*, the Finance Minister, to the Daijo Daijin, *Sanjo Saneyoshi*, Dec. 27, 1879, on the actual income and expenditure in the 8 fiscal years, from the commencement of 1868 to June 1875, Vol. 1, chap. 1, Part 1, Table 1, Section XI. Amongst others the following items are specified as extraordinary income:—

Fund for the redemption of the	
paper money issued by the “Han,”	3,455,049
Fund left over from the Bakufu and Han,	2,162,574
Han reserve fund,	1,523,809

I considered this last mentioned item by itself to be the value of the contents of the rice granaries when they were given up.

According to *Okuma Shigenobu's* “General view of financial policy during 13 years (1868-1880)” Tokyo 1881, p.16, almost 23 million yen of Han paper money issued stood as a debt against the Redemption fund. The government therefore could not be blamed if, in its financial difficulties, it transferred the Han reserve fund into the state Treasury.

from bad harvests falls to the task of the *present* Reserve Fund.

After the bad harvest of 1869 ordinances were made concerning the precautions to be taken for *bad years*, and for *famines*, and the number of days and the amount of relief was also regulated for damage arising from *wet* seasons and from *conflagrations*. These ordinances were embodied in the Ken Administration Law, and in the Directions for municipal and provincial administration.

In the year 1870, the ordinances which were promulgated had reference chiefly to relief in case of *injuries caused by fire*, by means of lending corn for food and sowing purposes (this corn had to be paid back by instalments), and also of sums of money for replacing burned agricultural implements. They also had reference to the number of days and the quantity of the rice granted for the relief and support of men and women.

In June, 1871, the system of *money* payments was introduced and loans of money took the place of loans in kind.

During the next few years the ordinances were altered backwards and forwards, instructions were given as to the methods of performance, until, in April, 1875, the relief of persons suffering from want during *epidemics* made a new important point.

The Relief Law of July 12., 1875 (No. 122) abolished, consolidated or extended all these earlier single ordinances. It mentions as causes of relief *drought, wet, storms*,

earthquakes, epidemics, floods, fires (mentioned only incidentally in a schedule), and *loss of cattle, misfortunes arising from natural causes*. This law recognises two kinds of relief: relief given, and relief lent. The loans are advanced either immediately, (thus in case of loss of house and home a maximum of 5 yen for building, for the re-procuring of destroyed agricultural implements a maximum of 10 yen), or only after the sanction of the Minister of the Interior, (thus, in case of want arising from natural calamities other than those enumerated above, for the procurement of corn for food and sowing, and in case of death of horses and oxen used for farming). The relief given is always prompt: *Bis dat qui cito dat*. They need however this practical doubling since they are but small in their amounts. Persons who have lost house and effects through wet, drought, storm, or earthquake, and who are in immediate want, as also those struck by an epidemic, are relieved for fifteen days with rice, 3 *go* unhulled rice for a man (between 10 and 70 years old), and 2 *go* for an old man over 70, for a woman or for a child. Hence a family consisting of a husband, his wife, two children and an old man would receive altogether 11 *go* per diem, i.e. in 15 days 165 *go*, or in round numbers $\frac{1}{6}$ of a *Koku*. Now suppose one *koku* of rice costs 6 yen (taking rather a high estimate) then, according to this law, *a whole family* receives on an average at most 1 yen's worth of relief given. Besides, the loans for shed building and agricultural implements together can at the most only come

to 15 yen.—Instead of rice twice as much barley or three times as much mixed corn* might be given.

I will remark, in order to give the reader an idea of judging the extent of the efficacy of the Relief-Law, that, for instance, in the 1½ years from July 1., 1879 to December 31. 1880, 501,751,866 yen was paid in loans by the Minister of Finance.† As the conditions of distress are altogether different in different years, these figures can only to a certain extent, be compared with the figures of the amount of relief afforded by the present law.

In pursuance of the reform of the Land tax, an ordinance (No 62) appeared in September, 1877, concerning the *respite of the Land tax* in years of bad harvests, and the ultimate payment in instalments of the same. If a whole village community, from misfortunes caused by the elements, has borne 50 % less produce than that adopted in the assessment of the Land tax then the Land tax is to be respited *to the village*. Regard is then paid to the percentage of each farmer's losses. In case of an entire failure of the crops the whole amount of the tax, is to be paid in instalments within 10 years, commencing from the following year; in case of a 50 % failure of the crops, half the amount of the tax is to be paid in 5 years in the same way and so on for the percen-

*) "*Zakoku*," mixed corn, i.e. beans, buckwheat, and three kinds of millet (Awa, *club shape millet*, Hiye, *crows foot millet*, and Morokoshi, *black millet*)

†) Cp. First Report on the Income and Expenditure of the Agricultural Relief fund, May 9., 1883, explanation No. 2.

tages between the two (90-100,80-90 &c) in proportion (with distribution over 9,8 &c. years). If a village is affected by a second bad failure of the harvest during the period of respite, a corresponding amount of the Land tax is again respited and the second course of instalments begins only after the termination of the first, so that no accumulation of two or more respited instalments for the same years can take place. By this regulation of the matter the charge additional to the ordinary Land tax charge can never be more than 10 % of the latter. Further, in the year of the second failure of the crops the instalment towards the repayment of the first Land tax respite is not collected; for this purpose the time of the course of the instalments is lengthened by one year. If a piece of land still owing respited Land tax instalments becomes waste from natural causes during the period of respite, the respited amounts are not collected any further.—All this, however, only has reference to *rice lands*; nevertheless, in case of “extraordinary failure of the crops,” the Land tax on arable land can be respited in compliance with a special petition.

This regulation for the respite of the Land tax was insufficient and unsatisfactory, since it took no notice of individual distress except in the case of the distress of the whole village, and in this case demanded proof that the amount of the harvest was the enormous amount of 50% below the quantity adopted in the assessment of the Land tax.

I worked out my proposal of a system of Land tax reserve funds, contained in the paper on the Diminution of the Land tax printed above,* from a unique arrangement, after a French prototype, in the Land tax constitution of *Westphalia and Rhenish Prussia*,† of a reserve fund “for taking over losses from failure of payment, and at the same time for the granting of necessary respites and reliefs.”‡

In the Land tax regulations for Rhenish Prussia and Westphalia the Land tax payers have, in *addition to the* main Land tax, to pay $1\frac{1}{2}\%$ of it to the Land tax *reserve fund* of the district. A common fund for all the districts of the western provinces is formed from a second extra-payment of $\frac{1}{2}\%$; this fund serves if necessary to strengthen the Land tax relief fund of the district, if the $1\frac{1}{2}$ p.c. on the sum-total of the Land tax paid to the reserve fund should sometimes not be sufficient to cover the losses occurring, or the remissions granted according to the existing decrees; but this common fund is *first and foremost* to be applied to the maintenance

*) See above, p.p. 252.227, 240 and 241.

†) Cp. The Collection of Prussian Laws, Jan. 21, 1839.

‡) The Rhenish-Prussian and Westphalian regulation had its origin in the remission fund (*Fonds de non valeurs*) of the French Land tax, which during the French rule came into operation in Rhenish Prussia and Westphalia; The French Land tax was introduced by the *Assemblée constituante* in France, law of December 1., 1790 and regulated in greater detail by the Law of November 23, 1798. This remission fund was supplied by an addition of 2% to the main tax in the same manner as the Land tax reserve fund is now. (G. H. A. Mascher, The Land tax Reform in Prussia on the basis of the Law of May 21 1861. Potsdam 1862, p. 43.).

of the Terrier. This reference to the maintenance of the Terrier I have omitted.

My proposition was acted upon with an unexpected promptness. My honoured chief, the Finance minister *Okuma Shigenobu*, with the assent of the Daijokuwan, inserted the sum of 1,200,000 yen in the budget for the fiscal year 1879-80, as a state contribution to the "*Bikō Cho Chiku Kin*," "Agricultural Distress fund."

He accompanied this item in the remarks about his budget with the statement that, since, in the place of a tax fluctuating according to the produce of the crops, a land tax has been established upon the basis of the average crops of the past 5 years, the amounts of which are fixed, and since this Land tax, therefore, no longer permits the government to accumulate surplus amounts in good years every body must consequently assume the responsibility of saving in times of bounteous harvests, and of making provision for times of need. Considering that the government does not receive any more than is right and fair, it can with a fixed tax, no longer grant remissions. People, however, generally squandered all their surplus income in prosperous times, without paying any attention to the future, fell into want after bad harvests, and became incapable of paying their taxes. The system of respiting the Land tax with supplementary instalments, brought into operation by the government in 1877, makes persons who are so careless as to have no foresight, and who are thus unable to pay the first tax on the appointed day, still more helpless if they

had to refund a respite sum of money besides paying their yearly land tax. Looking at the past, one could prophesy that if the above system were to be continued in years to come, the whole land would be encumbered with debt from this cause. The reason why there is want is that there is no plan to enable the people to lay by a reserve for bad years, but on the contrary only an institution which, after years of bad harvests, simply weighs them down still more; that there is no plan to unite the forces and combat the calamities. Such a plan has been developed this year. The government intends to stimulate the establishment of public funds against possible misfortunes, and have come to the decision of putting by 3% of the yearly Land tax, or 1,200,000 yen per annum as its contribution to this fund, by reducing the public expenditure as much as possible.

In December, 1879, I had the satisfaction of being entrusted with the draft of the law with regard to the Agricultural Distress fund, being further instructed to include the persons paying Land tax with an addition of 3% to it.

My draft treated of the following subjects in 16 articles :

1. The organization of a system of Agricultural Distress funds, a central one, one in each province, eventually one to be voluntarily established in each district by the inhabitants.
2. Tasks of the System : (a). to prevent deficiencies in the revenue arising from losses on the Landtax.

- (b). to help persons paying Landtax who have fallen into want through misfortunes or bad harvests.
3. Distribution of the different tasks over the different parts of the system.
 4. State contributions; 100,000 yen to the Central fund, 300,000 yen to the Provincial funds, and 800,000 yen to the County funds.
 5. Contributions of the taxpayers to the fund: 3 % of their landtax.
 6. Granting and refusal of the relief petitions. Appeal.
 7. Administration through the National reserve fund bureau, Prefects, Sub-prefects.
 8. Bearing of the cost of administration.
 9. Investment of property in government securities, and in the post-office-savings banks.
 10. 11. and 12. Supervision of the management, and the audit for the 3 kinds of reserve funds.
 13. Statistics, and publication of reports.
 14. Methods of procedure in case of abandonment of a voluntarily established County Reserve fund.
 15. Inadmissibility of distraint by creditors upon reliefs and loans granted.
 16. Abolition of the Regulation on Landtax respites.

My rough draft in the further legal stages was naturally somewhat altered, especially with regard to simplification, and abbreviation, but also by the addition of historical features of the former method of relief. The lowest grade, the County funds, were abandoned, because at the time the

Counties had no representative assembly (Gun-Kuwai), and the method proposed by me for connecting them with the still smaller assemblies and representatives of united villages and townships (Cho-son-kuwai, Sodai) was beset with difficulty. With this the proposition of making the County reserve fund serve as an *Agricultural Credit bank* lost its *point d'appuie*, the object of which was: "to grant to landtax payers who are suffering undeservedly from want from the above misfortunes advances up to double the amount of their Landtax, to be paid back by instalments, not bearing interest meanwhile, if these advances are necessary, in order to keep such taxpayer in a position of being capable of continued productive work."

This proposition especially I would save from oblivion, since, if once the representation of the Counties (Gun-kuwai) were introduced, and the Agricultural Distress funds were extended by a lower grade, an efficient means for the combating of Agricultural usury would thus be afforded.

A further advantageous difference of the law as compared with my rough draft is that the law makes the payment of contributions of the taxpayers universally obligatory, whilst my draft left the establishment of the *County* fund, with such contributions, still to the unfettered *decision* of each provincial diet, and on the other hand, did not allow the Counties which possessed no such funds, to participate in all the benefits of the institution.

I now proceed to the regulation of the Agricultural Distress fund at present in force.



II.

The present Organization

of the

Agricultural Distress Fund.

Notification No. 31, of June 15th, 1880.

The appended regulation concerning the Agricultural Distress fund comes into force on January 1., 1881. The following regulations are repealed from the same day (a) regulation No. 122, promulgated in July, 1875, concerning the temporary relief of the poor, and (b) regulation No. 62 promulgated in September 1877, concerning Landtax respites in years of bad harvests.

(signed) *Sanjo Saneyoshi*

CHANCELLOR OF THE EMPIRE.

The Agricultural Distress Fund.

ART. 1. By Agricultural Distress moneys we understand the money to be handed over to sufferers from a remarkably bad harvest or from undeserved misfortunes for the procuring of food, shelter, agricultural implements and seed corn. Out of these funds relief is to be granted or advanced to those who for the same causes cannot pay the state Land-tax.

ART. 2. Each province (Fu, Ken) in order to create a relief fund is publicly to collect a sum from every land owner in proportion to his Landtax payment. The

provincial assemblies (Fu-ken kuwai) are to assess the amount of this contribution. The sum total of these contributions, however, is not to be less than the State endowment.

Note. For towns (Shi-kai) the provincial assembly can, with the approval of the government, determine a different manner of collection from that of the counties (Gun, Son).

ART. 3. The State gives a yearly donation of 1,200,000 yen to the relief fund.

ART. 4. Of this sum 300,000 yen to go to a central relief fund under the supervision of the minister of finance. The remaining 900,000 yen to be divided among the provinces in proportion to the amount of their Landtax payment.

ART. 5. Proposals for the collection, disbursements, keeping in one or more places, and concerning the buying of grain by the provincial relief fund are to be submitted to the said provincial assemblies by the prefects of the towns or provinces (Chiji or Kenrei) and the resolutions of the assemblies to be communicated to the Ministers of the Interior and of Finance on whose approval the execution depends.

The grain depot not to exceed half the sum of the relief fund and the other half to be invested in Government securities.

ART. 6. The mode of disbursing the relief funds over which the provincial assemblies have control is confined to the following limits:

1. To those only who, through the above cases of misfortune, cannot support themselves, sums of money to be distributed for food for a term not exceeding 30 days.

The sums of money granted for shed buildings not to exceed 10 yen, and those for agricultural implements and seed corn 20 yen per household.

2. Relief and loans for Landtax payments to be given to those only who, without selling house and property, could not pay their Landtax on account of the said misfortunes.

ART. 7. If the relief to the distressed, and the relief and loans for the Landtax payments exceed two thirds of the provincial relief fund, this circumstance to be notified by the said town or province prefect, and an addition from the central reserve fund to be made after consultation between the Ministers of the Interior and of Finance.

ART. 8. Those provinces (Fu, Ken), towns and counties (Ku, Gun) parishes and unions of parishes (Cho, Son) which from olden times possess a relief fund, can transfer it to the relief fund now to be created.

ART. 9. The Finance Minister to examine the income and expenditure of the provincial relief fund every year, and at irregular intervals.

ART. 10. The town or province prefects in July each year to report to the Ministers of Finance and of the Interior on the income and expenditure of their respective provincial relief funds, and the two Ministers

conjointly to publish each year the income and expenditure of both the central and provincial Agricultural Distress funds.

ART. II. This regulation to be in force 20 years.

The provincial assemblies to decide on the mode of control of the provincial relief funds in hand after the expiration of this period.

Two further brief ordinances concerning the Agricultural Distress fund have since appeared. The first one ordains that the levying of the contributions to the provincial relief fund is to be made in the same way as that of the Landtax. The contribution to the Provincial relief fund can, however, be remitted to those who in the year in question have received relief or a loan from the fund. The second ordains that complaints against the relief funds are to be brought before a court of justice.

A comparison of the clauses of the new law with those of the repealed regulation with reference to the relief of the poor and the respite of the Landtax will demonstrate how much more favourable the present ordinance is for the persons suffering from want. As we have shown, donations could formerly not exceed about 1 yen per family, now they can not only amount to more than 32 yen for food, shelter, implements, and seeds of different kind, but can be increased by a non-

repayable contribution towards the payment of the landtax. Whereas now a gratuitous donation is given, a loan was formerly granted, and that too, in the maximum, only to about half the present donations: for cottage building, formerly 5 yen at most— now 10 yen; for procuring agricultural implements and seed grain, formerly 10 yen at most, now 20 yen. Formerly the Landtax could only be respited, it can now be wholly remitted, or partly remitted and partly respited (in the form of a loan to be paid back by instalments). Formerly the landtax respite came into operation only when a whole village community was suffering from distress, now landtax relief is afforded in cases of individual distress. Formerly a crop produce of only 50 p.c. of the produce adopted for the landtax assessment, that is, an enormous failure, had to be proved; at the present time, although the clause also runs “in cases of great agricultural distress,” yet in consequence of the absence of limiting figures free scope is left to the benevolent opinion of the officer, who decides on the proffered claim. Formerly only the failure of the rice crop found regular consideration, now no difference is made between this and other crops. Formerly failures of the crops alone could justify landtax respites, now gratuitous contributions to the payment of the landtax follow likewise in case of distress arising from any of the other causes (fires, cattle plague, epidemics, war, &c., &c.). On the other hand, a loan for the reprocurring of farm horses and oxen which have perished from

accidents or have been killed, is no longer possible. However, these kinds of loans were formerly granted only in very few cases, since they depended upon the previous consent of the Minister.



III.

Report on the Working of the Agricultural Distress Fund

from Jan. 1., 1881, to March 31., 1886.

The German *name* used for it (Missernten-Deckungsfonds, Crop Failure Covering Funds,) as is evident from the above law, is in reality too restricted a one, since the fund is not only available in cases of bad harvests but also in the case of other calamities such as fires cattle-plagues, epidemics, earthquakes, landslips, &c. &c. However it is the closest rendering of the Japanese term *Biko Cho Chiku Kin* which literally means "funds saved and reserved for bad harvests." According to the actual uses of the fund the best name would be "*Agricultural Distress Fund*." The English newspapers at first translated the expression by "Famine Relief Fund," later on, more in harmony with its uses, by "Agricultural Distress Fund." The French translation in the official *Résumé statistique*, viz "*Fonds de prévoyance pour secourir les personnes victimes des divers sinistres*" does not at all show the limitation of the use of the fund to succouring only landtax payers. On the other hand, my own rendering, originally deduced from the name of the Rhenish institution viz "*Grundsteuer-Deckungs-Fonds*" (Landtax Covering Fund) was scarcely indicative of the destination of the institution of generally aiding farmers suffering from misfortunes, a task which I myself also had assigned to the Fund; moreover, it was open to the objection that

the name could not contribute to the popularity of the measure, if the farmers as well as the state contributed to the fund.

Information on the working of the Agricultural Distress fund is obtainable in consequence of Article 10 of the Law which provides for the yearly publication of a report conjointly by the Ministers for the Interior and of Finance. Up to the present six reports of this kind have appeared.

Notification of the Finance Ministry.	Number of the report.	Date of the report.	Period covered by the report.
No. 42	First.	May. 9, 1883	Jan. 1, 1881 to June 30, 1881
" 10	Second.	Jan. 31, 1884	July. " 1881 " " " 1882
" 130	Third.	Nov. 10, 1884	" " 1882 " " " 1883
" 113	Fourth.	Aug. 21, 1885	" " 1883 " " " 1884
" 46	Fifth.	May. 20, 1886	" " 1884 " " " 1885
" 43	Sixth.	Apr. 12, 1887	" " 1885 " March 31, 1886

The whole period covered by the six reports thus amounts to 5½ years. The first of them extended over only half a year, because of the regulations coming into actual operation in the middle of the financial year only; and the last, i.e. the sixth, because of the alteration of the fiscal year, extended over 9 months only.

The chief contents of these reports are always formed by 8 tables :

Table 1.—Income and expenditure of the Central fund (balance brought forward from the year before, income, expenditure, balance in hand and the individual items of that balance : cash, deposits, corn, government securities).

Table 2.—Income and expenditure of the Provincial

Agricultural Distress fund, (income, expenditure, balance).

Table 3.—Comparison of the individual items of income and expenditure of the Provincial funds with those of the previous year. (Under *income* figure: Balance brought forward, State endowment, Contribution from the Central fund, contribution of land-taxpayers, supplementary contributions for arrears, interest on government securities as well as on deposits, profit, instalments towards the repayment of loans for the payment of the landtax, and various sources of income. The *expenditure* is composed of: relief granted for providing means of subsistence, for cottages, for agricultural implements, seeds of different kinds, aid towards the payment of the landtax, loans for the same purpose, expenses incurred in the construction and repair of granaries, losses, and sundries). The items of the balance are specified in the same way as those of the Central fund.

Table 4.—Specific items of the cash receipts of the Provincial funds (balance brought forward, State endowment, contribution from the Central fund, contributions, supplementary contributions, interest on government securities and on deposits, profit, repayments of landtax loans, sundries, total).

Table 5.—Specific items of cash-expenditure, and cash balance of the Provincial fund, (food, shelter, agricultural implements, seeds of various kinds, grants for land tax payment, landtax loans, losses, construction and repair of granaries, sundries, total, cash balance).

Table 6.—Relief from the Provincial funds, according

to the nature of the calamity, (fires, floods, storms, hail, drought, snow, landslips, earthquakes, insect plagues, bad harvests, sickness, total).

Table 7.—Income and Expenditure of the Provincial funds upon the government securities account, (balance brought forward, purchases, sales, redemptions, balance, all classified according to the nominal value, and cost of purveyance).

Table 8.—Income and expenditure of the Provincial fund upon the grain account, (balance brought forward, purchases, sales, increase on measurement, decrease by measurement, exchange or decay, relief in kind, balance ; for each item, number of koku and cost of purveyance).

The tables are prefaced by explanatory remarks, but these only in rare instances contain more than a descriptive recapitulation of the figures.

As a further source of information I have made use of the *Résumé Statistique de l'Empire du Japon*, (1887) which on p. p. 50 and 52 gives two tables about the Agricultural Distress fund ; only for the years 1880-1884 however :—Table I. *Nombre des personnes assistées sur le fonds de prevoyance et montant des secours accordés*, and Tab. II. *Secours accordés par nature des sinistres*. These statistics, as compared with the reports of the Ministers, contain something new in as much as they give the number of persons and families afforded relief, which is not contained in the official report. I am indebted to the courtesy of Mr. Kuré, the chief of the Statistical Bureau of the Ministry of Communication, for procuring the

corresponding information for the years 1885 and 1886.

In the reports of the two Ministers I leave unnoticed the accounts for the individual Fu-Ken, and in the tables of the *Résumé Statistique* those for the larger districts, utilizing merely the sum-totals for the whole empire.

On the basis of the above materials I have drafted 19 tables, the first 7 of which treat of the *working* of the Relief fund, the next 3 of its *income and expenditure*, and the last 9 of the *administration of its property*.

Many of my figures were deduced by calculation from the Ministerial report. Those of my figures that give the periodical condition of property differ from the official ones, in that I have always incorporated with them the outstanding balances of the landtax loans, which the official reports omit in the property list. Since the reports only extend over single years, all totals and averages for the whole period are naturally my own work, this refers too to the computations of the average of relief, the prices of rice and securities, and the average proceeds of the different methods of investment, finally all percentages. From these circumstances my tables have assumed such a different appearance from the original ones that I find myself obliged to enter into the fullest details, in order to insure belief in their correctness and trustworthiness, instead of confining myself to a mere round statement of them, as I do in the accompanying text. The tables are to be found at the end of the book and the sheets are so arranged that they may be left open during the reading of the text.

Working of the Agricultural Distress Fund.

Table 1. Amount in cash of relief granted.

„ 2. Number of cases of relief.

„ 3. Average amount of relief.

„ 4. Mean amount of relief granted to a family assisted in all the different ways.

Table 5. Number of families assisted towards building cottages and the causes of their want.

Table 6. Amount of relief (including landtax loans) divided according to causes of distress.

Table 7. Status of loans for land tax payment.

Table 1. Amount in cash of relief granted. In the 5½ years under consideration, altogether 3,288,000 yen was granted in relief, or, exclusive of landtax loans, somewhat over 2,500,000 yen. The distress arising from the destruction of dwelling places undoubtedly was even greater than that arising from the high land tax. For we see that 33.2 per cent of the total amount of relief was granted for building purposes, whereas a very little less, viz. 30.4 percent, was granted for lightening the burden of the landtax. *It seems then that a real insurance of buildings, instead of a maximum grant for building purposes, of 10 yen per family, would be of almost as much value for the relief of agricultural distress as a lessening of the landtax.*

The total expenditure for the lightening of the burden of the landtax came to about 1,000,000 yen; the Provincial funds however granted only about $\frac{1}{5}$ of this sum

à fonds perdu, and almost $\frac{1}{5}$, (777,000 yen) under conditions of repayment.

The expenditure on agricultural implements, and seeds of different kinds came to about the same amount as that for means of sustenance. Of the whole sum granted in relief was 209,000 yen or 6.4 per cent for seeds of different kinds, 383,000 yen or 11.6% for agricultural implements, and 603,000 yen or 18.4% for means of sustenance.

The amount granted for means of sustenance is made up of a sum in cash (column 2), and the value of the relief in kind (Col. 3); I bring this into special prominence by two columns in this table. Col. 3 corresponds to Table 12, Col. 16.—In order to make the connection with Tab. 8, col. 13 clear, col. 12 was worked out and here inserted.

Table 2.—Number of cases of relief. In all 880,000 families were provided with shelter, agricultural implements, seeds of different kinds, landtax contributions or loans, in addition to the 3,800,000 people who were afforded means of sustenance. 365,000 families received either grants or loans for landtax payment, 234,000 for dwellings, 226,000 for seeds of different kinds, 54,000 for the re-procuring of agricultural implements. This table too demonstrates that the excessive landtax, and the fact of buildings not being insurable are the principal causes of distress.

The 880,000 families aided with relief makes the extent of the working of the funds appear greater than it is in reality for every family has been counted as an assisted

family as many times as it received different sorts of relief.

If we compare for the different sorts of relief, the yearly number of families who have received help and then take into consideration only the biggest figures in these different kinds of relief, as is done in the subjoined table, we shall find that the total number of assisted families may have been *possibly* in reality only about 330,000. For if in the first period, for instance, 4691 families were assisted towards building cottages, 2311 with agricultural implements and 1807 with seeds of different kinds, it is quite possible that the implements and seeds were destroyed along with the house by fire or inundation, and that out of the 4691 families assisted towards building cottages 2311 were *also* aided with

Period.	<i>Highest number</i>	
	According to Tab. 2.	of assisted families.
1	2	3
Jan. 1, 1881 to June 30, 1881	Column 3	4,691
July. „ 1881 „ „ „ 1882	„ 3	20,116
„ „ 1862 „ „ „ 1883	„ 3	24,580
„ „ 1883 „ „ „ 1884	„ 5	108,883
„ „ 1884 „ „ „ 1885	„ 3	100,455
„ „ 1885 „ March 31, 1886	„ 3	70,902
Jan. 1, 1881 to March 31, 1886 Total.		329,627

agricultural implements and 1807 *also* with seeds. In that case we should have to consider as the real number not 8809 “different” families, but only 4,691, the highest number of all the different kinds to which relief was granted during the period in question.

If we now contrast the 330,000 assisted *families*, or even a rather higher number, with the 3,800,000 *persons* to whom means of sustenance was given, it is evident that the latter cannot be simply the members of the above mentioned families, since the families would by no means average so large a number of persons. Means of sustenance must therefore have been doled out to very many persons, say about 2,000,000 who did not receive any other kind of relief.

The *Résumé Statistique* erroneously places the heading “Number of households” over the column “relief for building purposes” alone, and gives the title “Number of persons” to all the others. But it follows from the law, its bylaws, and from the nature of the case, that the number of persons is only to be considered in the case of “means of sustenance,” and in all other kinds of relief the number of the households or families must be considered.—Only when no attention is paid to the receivers of the relief, is it allowable to give a sum total, as I have also done in Table 2 column 8.

Table 3.—Average amount of relief. Table 3 is deduced from tables 1 and 2. For the whole period the average of one single sum of relief amounted only to 0.703 yen, that of each single family to 3.052 yen, and that of

a single person to 0.159 yen. The amounts are thus very insignificant, and even if the total sum amounts to several millions, it must not be forgotten that the relief can only effect a mitigation of the distress, but cannot put a complete stop to it. *The frequency of distress on the one hand and the insignificant amount of the sums of relief seem to me to prove the great want of agricultural insurance, which not only mitigates distress, but almost entirely makes good any loss.*

The average sum of relief granted to each family for building purposes amounted to 4.661 yen, that for agricultural implements 7.044 yen, and that for seeds of various kinds 0.923 yen. As is evident the average sums come a long way short of the allowable maximum of 10 yen for building purposes, and the 20 yen for implements and seed corn together.

The sums granted towards the payment of the land-tax amounted on an average to only 1.445 yen, and the loans for the same purpose to only 3.709 yen. From this we see that in granting landtax relief it has been a case of almost dwarf farms. In this too lies an other recommendation of the introduction of real agricultural insurance. *The Agricultural Distress funds, as mere distress funds, benefit almost exclusively the smallest farmers, and thus counteract the rise of an agricultural proletariat; on the other hand agricultural insurance would equally aid all farmers, even the largest.*

The average amounts of relief in kind are particularly diminutive. According to the average price of rice given

in Tab. 12, col. 7, 1 go i.e. one thousandth of a koku was as under, and from that we can see about how many “go” the relief amounted to per person during each period.

Period.	Average cost of 1 go of rice : yen.	Average cost of one relief for suste- nance : yen.	Average quantity in kind of one such relief : go.
1.	2.	3.	4.
Jan. 1, 1881 to June 30, 1881	0.007016	0.189	26.9
July. 1, 1881 to „ „ 1882	0.005817	0.289	49.7
„ „ 1882 „ „ „ 1883	0.004578	0.305	66.6
„ „ 1883 „ „ „ 1884	0.004002	0.364	91.0
„ „ 1884 „ „ „ 1885	0.004045	0.096	23.7
„ „ 1885 „ March 31, 1886	0.004088	0.166	40.6
Average	0.004257	0.159	37.3

According to the former relief law, at the most 3 go of rice per man, and 2 go per woman child or old man over 70 could be granted for 15 days; thus the maximum quantity granted could amount to 45 or 30 go respectively. According to the relief law now in force, about 37 go on an average are given, about the same as the former maximum. But in 1883-84 we see the average amounting to 91 go, i.e. about twice as much as could formerly be granted to a man, or three times as much as could be granted to a woman, child, or old man. The greater elasticity of the law now in force with reference to the measurement of the relief needed is doubtless an advantage in its favour.

The quantities worked out in col. 4 are only to be considered approximate ones, for one reason because they are based upon the wholesale, and not the retail price of rice.

Table 4. Average amount of relief granted to a family assisted in all the different ways.—The minimum and maximum of relief actually granted to one family in each of the different ways is not known, the same applies too to the actual maximum amount granted to a family by means of all the different ways of relief. If we wish to make an estimate in this direction the only way of obtaining an *approximate* maximum is by adding all the *average* amounts of reliefs together.

Thus a family aided with *all* the kinds of relief received on an average about 18½ yen. However these amounts fluctuated between 16 and 30 yen according to the years.

From this we can see that the relief granted by the Agricultural Distress Fund must, in very numerous cases, have been a very considerable, and important one, when the great food-purchasing power of money in this country is considered.

Table 5. Number of families assisted towards building cottages, and the cause of their want.—234,100 families were granted sums of relief to the amount of 1,091,000 yen, or 4.66 yen on an average, for *building purposes* on account of the destruction of their dwellings by the elements (Tab. 1, col. 5). The greatest number of the dwellings were destroyed by *storms* (Typhoons!) viz

above 99,000 or 42.₃₇ per cent of the total number of dwellings destroyed. *Inundations* destroyed the next greatest number of houses, viz over 70,000 or almost 30 per cent. During the period under consideration *fire* stood third; it consumed over 64,000 houses or 27½ per cent. *Earthquakes*, which we know from Japanese History have now and then caused awful destruction in town and countrys, *landslips*, and *snow* occupy a very insignificant position in the period in question; still they accounted between them for the destruction of 395 dwellings.

In the above figures I can behold an emphatic confirmation of the fundamental idea of my "Collective Insurance of Buildings in Japan" (1878), which is that it would not suffice to insure the houses against fire alone, but that the security of prosperity and of the mortgage-creditor requires in this country an insurance of buildings against collective danger. I repeat that, according to the statistics before us on the period in question, out of 234,000 houses destroyed only 27.₃ per cent were destroyed by fire, and 72.₃ p. cent by other causes!

*Table 6.—Amount of relief (including land tax loans), divided according to the causes of distress.—*The total amount of relief 3,288,000 yen (cf. Tab. I, col. 10 and Tab VI, col. 13) may be classified according to the ten original causes of distress. *Inundations*, with 1,024,000 yen or 31.₁₅%, caused the greatest expenditure for relief; *fires*, with 897,000 yen or 27.₂₇%, the next most; *storm and hail* together, with 824,000 yen or

25.06%, nearly as much. Draught demanded nearly 500,000 yen or 15.13%. None of the remaining causes, snow, land slips, earthquakes, insect plagues, epidemics, and bad crops in general (without a nearer specification of the cause, as perhaps too long a spell of cloudy weather) cost 1% or 33,000 yen, of the total sum granted in relief.

In the first $2\frac{1}{2}$ years of the period in question fires always caused the greatest distress, in the fourth year draught, in the fifth storms, and in the sixth inundations.

In the reports, storm and hail were five times mentioned separately; and once included under one figure. If we put the whole of this latter injury down to hail, then 785,000 yen or 23.87% will come under storm, and only 39,000 yen or 1.19% under hail. Incidentally we may point to an interesting physical fact, the rare occurrence of hail in Japan. A mere system of *Hail insurance* in Japan, after the European pattern would be quite out of place!

Table 7.—Status of loans for Land tax payment.—During the whole period under consideration, 777,000 yen were lent by the Agricultural Distress fund for the lightening of the burden of the landtax; of this sum 114,000 yen had been paid back by the debtors, so that on March 31, 1886, the end of the period, 663,000 yen lent were still outstanding. Col. 6 of our table gives the loans still outstanding at the end of every fiscal year. They are the figures of which I have already said that I have put them down as assets in the property list. An error

on my part would only be possible in as far as a few claims on loans may perhaps have been renounced, in which case they would naturally have disappeared as assets. Of such renunciations however there is no mention; moreover they are improbable. Making allowance for the just mentioned slight restriction, the figures on the property list given farther on are exact.



Income and Expenditure of the Agricultural Distress Funds,

Table 8.—Income, expenditure and status of the property of the Provincial funds.

Table 9.—Income, expenditure and status of property of the Central fund.

Table 10.—Statement as to the contribution from the Central fund to the Provincial funds.

Table 8.—*Income, expenditure and status of property of the Provincial funds.*—I give the income and expenditure in this table without the manipulation items running through which only refer to the *methods of investing* the means, such as the buying, and selling (also redemption) of Government securities and grain ; nor do I mention the granting or repayment of loans. The income of the Provincial funds during the whole period amounted to 11,387,000 yen, and their expenditure to 2,885,000 yen, so that they possessed a property balance of over 8,500,000 yen on March 31. 1886.

The income is composed of the different kinds of contributions, of interest on investments, profits, and sundries ; the expenditure is composed of relief, and principally of charges arising from the storeage of the rice.

The chief source of income accrued from the contributions of the Government treasury to the Provincial

funds, viz. 4,916,000 yen; the farmers themselves raised an amount very nearly equal to this, viz. 4,802,000 yen. The state contribution consisted firstly of the regular State donation of 4,725,000 yen in all, and secondly, in four fiscal years, of extraordinary grants from the Central Agricultural Distress fund, which latter entirely derives its means from the State treasury. Such grants are those provided for in Article 7 of the Agricultural Distress fund law, in case a Provincial fund should be reduced to one third of its means. These grants amounted in all to 191,000 yen.

The contributions of the land owners amounted to 4,802,000 yen as against 4,725,000 yen, the State endowment. According to the letter of the law these two ought to be at least equal; it is now voluntarily made $1\frac{1}{2}$ per cent greater, principally it would seem for the sake of convenience in the computation of the allotments. The contributions are paid punctually: of 4,802,223 yen only 3,588 yen or 0.075% were "supplementary contributions of the farmers."

The interest on Government securities and deposits amounted to almost 1,400,000 yen; profit on sales and redemption of Government securities and on the sale of rice to 233,000 yen. Besides the above, 36,000 yen was put down to "Sundries."

The principal item of expenditure (col. 13) is that which we have already noticed in Table 1. col. 12, viz. the sum granted in relief. Beside this there was

a further expenditure of 374,000 yen which was caused almost wholly by the storage of rice; it represents the loss incurred by the sale of rice (182,000 yen) and that incurred by destruction and by decrease on measurement (38,000 yen), cost of granary building and repairs (22,000 yen), rent of granaries, salaries of the granary custodians, freight, loading and unloading charges, and sundries (132,000 yen). I said above that the 374,000 yen was "chiefly" for the charges entailed by the storage of rice, there are indeed some losses caused by the sale of Government securities (bonds) included under "loss from the sale of rice;" these losses however cannot have been great since during the period in question Government securities have been continuously rising in prices. Further some losses caused by the redemption of stocks are also included; in these cases the redemption concerned government securities which had been bought in above par. Finally some few "sundries" are contained therein which, more especially in the first 1½ years, arose from various expenses of organization. Costs of administration proper are nowhere given. The law is silent about them; in my rough draft I simply charged them upon the Provincial prefecture (Fu-Kencho); and it appears that this is what has been actually done with them, but some are probably included under "Sundries."

As a more general proof of the above assertions that in the united statement of profit arising from sales

(including redemptions) of Government securities *and* rice, the *profit* ought mainly to be attributed to the *government securities*, and, in the united statement of loss arising from the sale and redemption of government securities and sales of rice, the *loss* ought mainly to be attributed to *rice*, to prove these assertions, I repeat, I will here give a calculation of the average prices which, in the 6 fiscal years of the report, have been paid by the provincial funds for the *purchase* of government securities and rice. The details of this calculation are given in Tab. 16, Cols. 2, 3, and 4, and in Tab. 12, cols. 5, 6, and 7.

Period.	Average purchase price of gov. securities per 100 yen nominal value.	Average purchase price of rice per Koku.
Jan. 1, 1881 to June 30, 1881	72.031	7.016
July 1, 1881 " " " 1882	74.115	5.817
" " 1882 " " " 1883	77.147	4.578
" " 1883 " " " 1884	92.330	4.002
" " 1884 " " " 1885	93.582	4.045
" " 1885 to March 31, 1886	102.664	4.088

The contrast between the courses of the two sets of prices strikes the reader at a glance.

If we try to represent the items of *profit* arising from government securities and those arising from rice separately, we can do so, at least approximately, by referring to the individual reports of the 48 administra-

tions of the funds.* After a careful examination of them it appears to me that about 215,000 yen of the *profit* arises from the Government securities, and about 18,000 yen from the business in rice.

Salvo errore I would write columns 8 and 9 of Table 8 approximately as follows :

Period.	Profit	
	on gov. securities.	on rice.
1881—82	292.355	11.978
1882—83	6,818.127	—
1883—84	102,440.989	3,889.325
1884—85	36,719.581	12,846.406
1885—86	68,754.271	1,083.598
Total :	215,025.323	17,831.307
	232,856.630	

If in the same manner we try to represent the above mentioned items of *loss*, viz. 182,000 yen, separately for government securities and rice, we can do so, at least approximately, by referring to the individual reports of the 48 administrations of the funds. After a careful examination of them it appears to me, that, *salvo errore*, the loss (cf. Tab. 8. Columns 14 and 15) divides itself as follows :

* Tokyo, Kiyoto, and Osaka Fu, Kanagawa and Aichi Ken have separate Agricultural Distress funds for the town and country divisions (Ku and Gun); hence with only 43 Fu-Ken in the main island we get 48 administration of the fund. Yesso, Liu-Kiu, and the Bonin Islands are still without Agricultural Distress funds.

Period.	Loss	
	on government securities.	on rice.
1881—82	—	10,227.811
1882—83	—	3,846.454
1883—84	988.351	47,863.784
1884—85	* 3,701.515	82,360.489
1885—86	2,607.358	29,936.576
Total.	7,297.224	174,235.114
	181,532.338	

Table 9.—Income, expenditure, and status of property of the Central fund.—This table as well as table 11. B., of which we shall speak later on, extends over a period of $6\frac{1}{4}$ years instead of $5\frac{1}{4}$. I remarked above, in the preliminary history of the law, that a yearly contribution of 1,200,000 yen, to begin from the first of July 1879, was provided for in the budget at the same time as the announcement of the plan, that the law itself was promulgated only on June 15, 1880, and came into force only on Jan. 1, 1881. The treasury thus paid 1,800,000 yen to the fund, and from this sum supplied 501,752 yen's worth of relief, or more properly speaking loans, which were required during this period according to the former relief law and before the coming into force of this one. The balance of 1,298,248 yen was transferred to the Central fund on Jan. 1, 1881.

* Inclusive of a loss of 1,449.460 yen, experienced by the Iwate Ken administration of the funds, which it is impossible to characterize.

After this generosity on the part of the State, which was not compelled by the wording of the law, we cannot reproach the Finance ministry for not paying any interest for the Central Agricultural Distress fund on its deposits in the hands of the Department. The Finance ministry considered it necessary that the Central fund should in the beginning have an amount of ready money until the Provincial funds had accumulated more ample means. In my draft I proposed that the capital should be invested in government securities for the Central fund. The law itself contained no such provision. So much the more is it to be recognised that the practice of not paying interest on the central fund was abandoned in 1883—84, and that from that time an interest on it has been paid.

In the period from Jan. 1, 1881 to March 31, 1886 the State endowment to the Central fund amounted to 1,575,000 yen, or, counting in the said 1,800,000 yen, to 3,375,000 yen.

The interest on government securities and deposits from July 1, 1883 to March 31, 1886 amounted to 196,000 yen, but in this sum are included some, probably unimportant, "sundries," and "profits on the sale of grain."

The sum-total of income amounted to over 3,571,000 yen.

The expenditure was caused, firstly, before the period of the Agricultural Distress law coming into force, by grants of relief to the amount of about 502,000 yen (loans,

which remained repayable to the treasury), secondly, after its coming into force, by contributions to the amount of 191,000 yen, to such Provincial funds as were reduced to $\frac{1}{3}$ of their means, and, thirdly, by 166,000 yen, the loss on the rice business of the Central fund.

The total expenditure 860,000 yen subtracted from the total income leaves a balance of 2,711,000 yen in favour of the Central Fund at the end of the period in question.

Table 10.—Statement as to the contribution of the Central fund to the Provincial funds.—The individual items in the income accounts of the Provincial funds (Table 8, column 4), “Contribution from the Central fund,” and those on the expenditure account of the Central fund (Tab. 9, col. 7), “Contribution to the Provincial funds,” at the first glance do *not* agree, whereas they surely ought to do so. The Provincial funds have included the contributions in their accounts as soon as they were necessitated or agreed upon, before their actual payment, whereas the Central fund only booked them when they were actually paid. Ultimately the sums amount to exactly the same figure, viz. 191,442.693 yen, in both, as should be the case.

The Administration of the Property
of the
Agricultural Distress Funds.

Table 11.—A. and B. Manner of investing the Agricultural Distress fund (A. the Provincial, B. the Central fund).

Table 12.—Grain transactions of the Provincial funds.

Table 13.—Computation of the actual cost price of the Provincial funds' rice.

Table 14.—Grain transactions of the Central fund.

Table 15.—Computation of the actual cost price of the Central fund's rice.

Table 16.—A. and B.—The business of the Agricultural Distress fund in government securities. (A. the Provincial funds.—B. the Central fund.)

Table 17.—A. and B.—Interest derived by the Agricultural Distress funds from government securities. (A. the Provincial funds. B. the Central fund.)

Table 18.—Interest derived by the Provincial Agricultural Distress funds from deposits.

Table 19.—The property of the Provincial and Central funds together and the manner of investing it, on March 31., 1886.

Table 11.—A. and B. The manner of investing the property of the Agricultural Distress fund.

A. *With regard to the Provincial funds.*—In order to gain a better idea of the use of the different manners of investment, I have computed Table 11 in its principal columns by percentages.

At the end of the period in question.	The amount of property at the end of each period taken as equal to 100.			
	Percentage invested in gov. securities.	Percentage invested in rice.	Percentage invested in loans.	Percentage invested in deposits and cash.
Comp. Table 11. A.:	Col. 4	Col. 7	Col. 9	Col. 10 & 11
Jan 1, 1881 to June 30 1881	50.8	4.4	—	44.8
July 1, 1881 " " " 1882	65.3	7.3	0.2	27.2
" " 1882 " " " 1883	68.4	9.2	0.7	21.7
" " 1883 " " " 1884	60.8	17.2	4.6	17.4
" " 1884 " " " 1885	67.6	10.0	5.7	16.7
" " 1885 to March 31, 1886	67.0	9.7	7.8	15.5

At first the Provincial funds invested *one half* of their property in *government securities*, the proportion, however soon rose to about *two thirds*. Only in the year 1883-4 did the capital invested in government securities sink as low as 61 per cent by reason of very large investments in rice caused by its very low price.

The Provincial funds are allowed by the Agricultural Distress fund law to invest one half of their property in rice. They never made use of this permission. In the above mentioned year their investments in rice rose

temporarily to 17 per cent, after being advised in a circular addressed to them by the Ministers of the Interior and of Finance to utilize the low price of rice for buying great quantities to provide for years of bad harvest and of famine. The policy of the Provincial funds as a whole,* appears to be to invest about one tenth of their property thus.

The part invested in *loans for the payment of the land tax rose without a break.*

The *amount in deposits and cash* grew less and less each year, a very favourable circumstance for the proceeds from the total property; from 45 percent of the property it decreased to 15½ percent. If we perhaps ask whether the Provincial fund's means kept in readiness in case of unforeseen, great, and sudden calamities were not too insignificant, we obtain the answer from the absolute figures that the money ready for immediate use rose steadily from 377,000 to 1,319,000 yen. Further, the stores of rice can be looked upon as cash, because of their being available for relief in kind; during the period under consideration they rose from 37,000 to 822,000 yen. In conclusion, we must not forget that the 5,700,000 yen's worth of government securities apart from their sale on 'change must from their capability of being pledged with a bank be considered a source of ready money, always at hand.—Under these circumstances

*) Of the 48 Fund administrations only 6 transacted rice business according to the 1st report; 15 according to the second; 14 according to the 3rd; 28 according to the 4th; 29 according to the 5th; and 27 according to the 6th.

a *large* amount of cash is really unnecessary.—Fixed deposits for a long period, ditto for a short period, and ditto withdrawable at any time, and cash, are mixed up indiscriminately in the reports for the Provincial funds; we can nevertheless form an approximate idea as to how much of the item “Deposits and Cash” consisted of deposits bearing good interest, and how much of cash or deposits bearing little or no interest. On the basis of Table 18, col. 6 and 7, it appears to me that about 55 to 60 percent of the amount was invested in deposits paying *good* interest. This would leave over 45 to 40 per cent of the whole sum as cash and deposits at immediate disposal. If even only one third of the item were of the latter character, 125,000 to 440,000 yen would still always have been immediately available in the Provincial funds.

According to the above remarks, the Provincial funds appear to have invested their property both profitably and judiciously. A review of the profitableness of their rice investments is given below.

B. *Investment of the Central fund.*—The Management of the Central fund has successively been guided by three different principles with regard to the investment of the moneys of the fund.—In the $1\frac{1}{4}$ years both before and after the promulgation of the law, the Central fund simply kept all its income in cash without seeking for any profitable or promising investment. Thus the amount in cash rose in three years to 1,748,000 yen. The leading train of thought might

have been something of this kind: The central fund is to serve as a supplementary fund. It can only come into operation as a relief fund in times of *great* and wide-spread distress. Such wide-spread calamity may demand hundreds of thousands, nay, millions of money. If it occurred and the funds were invested in securities paying interest, it is evident that they could only at a great loss be converted into cash as quickly as necessary. If it was demanded that this conversion should take place without loss, the charges and costs of the sudden procurement of money would fall as formerly upon the Finance ministry, whilst the Agricultural Distress fund was created with a State endowment for the express purpose of relieving State finance of this irregular claim.—In the second period, i.e. the next three years from July, 1882 to July, 1885, it is true the Central fund retained 47 to 35 percent in cash, and invested the remainder of its property partly in government securities 39 to 33 p.c.), and partly in rice (14 to 32 per. c.). In this case it may thus have been argued: About 900,000 yen in cash will in all probability be enough to relieve the necessities of several provinces, since they have now already collected some means of their own. In the case of a more general calamity the credit of the State might perhaps be shaken, and the sale of government securities be so increased that if any belonging to the Central fund were offered for sale, they would have to be parted with at a loss. Now in a time of misfortune like this, rice would probably become very dear; if the

fund possessed a supply of rice, this could very easily be sold even advantageously; if it should then still be necessary to fall back upon the government securities, the profit on the rice will to some extent compensate for the loss on the government securities.—In the third period investment in government securities was *entirely* abandoned, the cash balance too practically so (it amounts now to only to 2. p. c.), the investment is concentrated on deposits (78 per c.), and rice (20 p. cent).

The subjoined table gives the calculations according to percentages :

At the end of the period in question.	The amount of property belonging to the Central fund at the end of each period taken aequal to 100.			
	Per- centage invested in <i>gov.</i> <i>securities.</i>	Per- centage invested in <i>rice.</i>	Per- centage invested in <i>deposits.</i>	Per- centage invested in <i>cash.</i>
Cf. Table 11, B.:	Col. 4	Col. 7	Col. 10	Col 9 + 11
July 1, 1879 to June 30, 1880	—	—	—	100.0
„ „ 1880 to Dec. 31, 1880	—	—	—	100.0
Jan 1, 1881 to June 30, 1881	—	—	—	100.0
July 1, 1881 „ „ „ 1882	—	—	—	100.0
„ „ 1882 „ „ „ 1883	39.1	14.4	—	46.5
„ „ 1883 „ „ „ 1884	37.1	22.1	—	40.8
„ „ 1884 „ „ „ 1885	33.4	31.8	—	34.8
„ „ 1885 to March 31, 1886	—	20.0	77.9	2.1

The three special advantages of deposits (1) that the capital does not suffer diminution in case of use, (2) that it bears interest, and (3) that it is withdrawable either immediately or on short notice, appear to have

argued in favour of this exceptional preference of investment in deposits.

The reports do not state where the deposits were made. Since a deposit bureau (*Yokinkiyoku*) was founded in the Finance ministry in May of this same year (1885), the conjecture suggests itself that the 2,112,000 yen of the Central fund were paid into it. And yet this seems not to have been the case, since in § 1. of the decree, the *only* object of the deposit bureau was said to be the receiving of the Post Office Savings Bank Funds, of savings deductions made from the salaries of certain officials as well as of deposits from temples, monasteries, societies, and private capitalists. The Distress fund moneys are not mentioned; but wherever it may have invested its money good interest is evidently paid.

It seems that as much cannot be said in favour of the Central funds' second method of investment, viz. rice. The Central funds' rice cannot, like that of the Provincial funds, be considered as tantamount to cash. The Provincial funds can hand over their rice *itself* to the indigent, whereas the Central fund has to pay its contribution to the Provincial funds in *cash*. And even if the latter were willing to accept rice at a fixed value, the Central fund would still in most cases have to bear heavy freight charges for the transport of the rice to the provinces in want of it, since its granaries are situated in the chief centres of trade viz. in Asakusa (Tokyo), Osaka, and Hiogo. As long as the Central

fund possessed safe and profitable interest bearing government securities *as well* as rice, the possession of the latter could be justified from the point of view that the price of rice generally rises at the time of calamities, whilst at such times government securities generally decrease, so that, under those circumstances, the possession of rice would act in a compensating manner. But the Central fund no longer possesses any government securities. Neither may we bring the Central funds transactions in rice under the other only economical point of view, namely that of the systematic "levelling of the prices of rice," as we will explain further on, when speaking more minutely concerning its rice business. Thus the only point of view remaining for the judgement of the Central funds rice storeage is that of Speculation, hazardous profit-seeking enterprise.—The results of the Central funds rice business up to the present we give in detail in Tables 14 and 15. They seem to argue against the retention of this method of investing the Central funds property.

Table 12.—Grain transactions of the Provincial funds.—In the 5½ years under consideration, Provincial funds bought 440,000 koku of rice for 1,874,000 yen at an average of 4.257 yen per koku; but during that time their stores of rice had been reduced by about one half, through sales, destruction, and the relief of the indigent, so that at the end of the period they possessed 221,000 koku of rice worth on an average 3.722 yen per koku or in all 822,000 yen. That is to say, they sold 207,000

koku for 1,010,000 yen, or at an average of 4.875 yen per koku, and gave, for the relief of the indigent, nearly 700 koku, worth 4000 yen, or on an average 5.829 yen per koku. The rice further underwent a loss of 2,000 koku in quantity by the exchange of unhulled rice for a less number of koku but equal value of hulled rice. Lastly the rice stores suffered a real loss both in quantity and value by destruction, rot, shrivelling, and decrease on measurement. These losses are estimated at 9,500 koku, in value 38,000 yen, at an average of 4.021 yen per koku. The value of the remainder as stated in the reports has been found in this manner: when the quantities are doled out from the rice-stores, the *former* cost of purveyance is subtracted, sack for sack, from the total cost price. The value of the remainder as stated in the reports than means that the rice *still in the granaries has cost* so and so much *at the time of its purchase*.

This former cost of purveyance has importance only as a booking item; it is only value on paper; it is not the *actual* value, for that is taken from the periodically ruling *market* prices. Nor must it be confounded with the *actual cost price*; further on I will allude to this at greater length.

If a number of koku of rice are sold from the granaries, they are, as was just said, subtracted at their original cost of purveyance however much the selling price was. If the selling price actually received was higher than the original cost of purveyance, we have, under income, an item of profit, if lower, under expenditure, one of loss. Thus in the booked income from sales we have to do only

with book sale prices from which one gets the *net* sale price (the real selling price) either by adding the given profit, or subtracting the given loss, as the case may be.

For the calculation of the real selling price I have made use of the values, given on the tables on pp. 301 and 302, for the profit and loss of the rice transactions; these figures will be pretty near the truth.

(See the calculation of the net selling price of the rice on the opposite page.)

It is interesting to contrast the net selling price per koku with the original price of the new purchases (Tab. 12, col 7) for each period under consideration.

	Per koku.	
	Net selling price.	Original cost of the new purchases.
1881	—	7.016
1881—82	8.414	5.817
1882—83	3.606	4.578
1883—84	4.134	4.002
1884—85	4.140	4.045
1885—86	3.601	4.088
1881—86	4.120	4.257

In 3 years out of 5 the net selling prices realized are profitably higher than the cost prices of additional purchases for the same year.

Table 13.—Computation of the actual cost price of the Provincial funds' rice.—For the computation of the actual cost price of the provincial funds' rice the booked prices are lacking in so far that they do not take into account :

Calculation of the net selling price of the rice.

Period.	Booked sale prices (= Tab. 12. Col. 9.) Yen.	Plus: Profit (Cp. Page 301) Yen.	Minus: Loss (Cp. Page 302) Yen.	Therefore Net Selling price. Yen.	Number of the sold Koku.	Therefore average net Selling price of rice per Koku. Yen.
1.	2.	3.	4.	5.	6.	7.
Jan. 1st 1881 to June 30th, 1881	—	—	—	—	—	—
July 1st 1881 " " 1882	44,717.441	11.978	10,227.811	34,501.608	4,100.205	8.414
" " 1882 " " 1883	11,106.949	—	3,846.454	7,260.495	2,013.266	3.606
" " 1883 " " 1884	171,400.368	3,889.325	47,863.784	127,425.909	30,817.605	4.134
" " 1884 " " 1885	616,738.516	12,846.406	82,360.489	547,224.433	132,172.769	4.140
" " 1885 " March 31st 1886	165,811.388	1,083.598	29,936.576	136,958.410	38,037.350	3.601
Jan. 1st 1881 to March 31st 1886	1,009,774.662	17,831.307	174,235.114	853,370.855	207,140.195	4.120

- 1.) Profit and loss on the sale of rice ;
- 2.) Cost of granary repairs ;
- 3.) Rent of granaries, salaries of store keepers, freight and labour charges of lading ;
- 4.) Losses of interest ;
- 5.) Finally, if the calculation of the actual cost price of the rice is to be a correct one, the value of the diminution from decay &c (Tab. 12, col. 12) must not be deducted from the original cost of purveyance as the income out of the sale of rice is deducted. The value of the diminution is certainly not income ! It is a loss in *quantity* to which there is no corresponding diminution of the total costprice of the stores. The number of koku of the diminution ought indeed to be subtracted from the stores, but the value lost must *not* be deducted from the cost of purveyance. That is : the more rice destroyed in the granaries, the higher the actual cost price of the remaining rice *per koku*.

We must therefore proceed to an entirely fresh arrangement.

For the sake of clearness we give the items of the calculation one by one :

Col. 1. Period.

Col. 2. Actual cost price at the commencement of the period.

Col. 3. Purchase price of new rice. (Plus.)

Thereto must be added as expenses :

Col. 4. Cost of granary repairs. (Plus.)

Col. 5. Cost of rent of granaries, wages of store-keepers, freight, costs of lading (Plus.)

As items of income from the rice correspond and are to be subtracted :

Col. 6. Value of relief in rice. (Minus.)

Col. 7. Net amount of the rice sales, i.e. the nominal sale price plus the profits and minus the losses on rice sales. (Minus.)

Here however we must stop again to correct an error. The above added items at our disposal are frequently some what too large, since various items of expenditure which ought not to be added are inseparably included in them. In col. 4 are also included expenses for the *building* of granaries, which ought not to be looked upon as mere expenditure, since the building itself compensates for the outlay; In col. 5. some "Sundries" are also contained which in all probability have only a partial connection with rice. In consideration of these two circumstances, let us subtract say 10,000 yen for each complete year as an estimated correction. To proceed :

Col. 8. Estimated correction. (Minus.)

From cols. 2-8 then follows :

Col. 9. Result hitherto of the actual cost price.

If now for each period be added :

Col. 10. Interest on capital, (Plus,) then the actual cost price of the rice at the end of the period results :

Col. 11. Actual cost price of the remaining rice in store.

To calculate the average actual cost price per koku we now require :

Col. 12. The number of koku of rice.

Hence follows :

Col. 13. Average actual cost price per koku.

The *values* to be inserted into this table we obtain as follows :

For Col. 2. from Tab. 13, col. 11.
,, ,, 3. ,, Tab. 12, col. 6.
,, ,, 4. ,, Tab. 8, col. 17.
,, ,, 5. ,, Tab. 8, col. 18.
,, ,, 6. ,, Tab. 12, col. 16.
,, ,, 7. ,, Col. 5 of the table on page 315.
,, 8. Estimated correction.
,, 9. Result of Cols. 2—8 of our table.
,, 10. Is calculated from Col. 2 + Col. 9,
multiplied by $\frac{1}{2}$, in order to obtain
the mean value of the capital in-
vested in rice. From this the loss in
interest is put down at 5 per cent per
annum.

Col. 11. = Cols. 9 + 10 of our table.

For ,, 12. from Tab. 12, col. 18.

,, ,, 13. ,, Cols. 11 and 12 of our table.

To 1,874,000 yen, the original cost of purveyance of 440,000 koku of rice, must thus be added 22,000 yen for the repair of granaries, 132,000 yen for rent of granaries, store keepers wages, and freight and labour charges, and 162,000 yen for interest on capital. From

this the total cost rises to 2,190,000 yen. Through sales, destruction, loss from barter, and relief in kind about 219,000 koku disappear from the quantity of rice, but create at the same time income to the amount of about 857,000 yen, or including an estimated correction of 52,500 yen, to 910,000 yen. Thus finally 221,000 koku correspond to a real price of 1,280,000 yen as compared with 822,000, the ultimate book price according to the accounts of Tab. 12.

Since there is a considerable difference between the former book price (Tab. 12, Col. 19.) and the actual cost price as worked out by myself and fully corroborated in table 13. For the sake of comparison I will here put them side by side. In order to intimate that in my calculation an estimated element—the correction of 10,000 yen per year, and the 5 per cent interest on the mean value of the capital invested in rice—is contained, I will add an “approximately.”

A correct manner of calculating the real price is of importance to the Provincial funds since by this means only can they be fully enlightened as to the best ways of carrying on their rice transactions, and whether the investment of a part of their property in rice is of advantage or disadvantage to them. Even if they have bought the rice cheap, its real price is much increased by several years storage through granary charges, and interest. If they imagine their under-estimated book price to be the actual cost price, they are always in danger of unwittingly selling their rice at a *loss*, whilst they

On	Booked price. Yen.	Average Booked price per koku. Yen.	Actual cost price. Yen.	Average actual cost price per koku. Yen.
			Approximately.	Approximately.
June 30th 1881	36,677.372	7.103	44,261.406	8.572
" " 1882	181,923.999	5.394	208,497.339	6.182
" " 1883	392,798.966	4.896	446,587.976	5.566
" " 1884	1,039,534.801	4.090	1,202,452.566	4.731
" " 1885	743,254.072	3.711	1,089,853.768	5.442
March 31st 1886	821,788.235	3.722	1,280,522.223	5.800

ought only to part with that portion of their store which would be liable to spoil by longer storage, or which is already so dear that by longer delay further loss might probably be expected.

Looking at the average price the Provincial funds seem to have generally sold at a loss in comparison to the actual cost prices, while according to their booked prices they almost always appeared to have sold at a profit.

Period.	Average actual cost price. (Cf. Tab. 13, Col. 13)	Average net selling price. (Cf. Tab. 12, Col. 10)	Sold at :
Jan. 1st 1881 to June 30th 1881	About 8.572	—	—
July " 1881 " " " 1882	" 6.182	8.414	a profit.
" " 1882 " " " 1883	" 5.566	3.606	a loss.
" " 1883 " " " 1884	" 4.731	4.134	a loss.
" " 1884 " " " 1885	" 5.442	4.140	a loss.
" " 1885 " March 31st 1886	" 5.800	3.601	a loss.

The more exactly calculated real price would prove to the Provincial funds that they ought to buy the bulk of their rice only in years of extraordinary cheapness,—when the price of rice in their nearest market towns is say 25 to 30 per cent cheaper than the average adopted in the assessment of the Landtax. Besides it would induce them to preserve their rice stores—exclusive of those portions which are not durable and spoil more and more—for years when the price of rice is above the average, eventually for years of dearth. Such information would then lead to the re-observance of the old “method for equalizing the price of rice” (see above), practised in the interest of the funds themselves. The losses of the funds on rice originate from the non-observance of this rule.

Does it then follow that the fund administrations may only buy rice in very cheap years, when the prices are from 25 to 30 per cent below the average? Certainly not, for it is a justifiable speculation to lessen the average actual cost price by means of additional purchases as long as they are only below the actual cost price of the stores and are not concluded at too high a figure.

And thus the Provincial funds have really acted, not indeed with reference to their booked price, but with regard to the true real price. This we see from the following table :

Period	Average actual cost price at the commencement of the period (Tab. 13, Col. 18.) Yen	Average cost of additional purveyance (Table. 12, Col 7.) Yen
Jan. 1st 1881 to June 30th 1881	—	7.013
July 1st 1881 to June 30th 1882	8.572	5.817
" " 1882 " " " 1883	6.182	4.578
" " 1883 " " " 1884	5.566	4.002
" " 1884 " " " 1885	4.731	4.045
" " 1835 " March 31st 1886	5.442	4.088
On April 1st, 1886	5.800	—

But, even for these speculative purchases with a view to a reduction of the average real price, some limit ought to be observed, and they ought, in my opinion, to be relinquished as soon as their price rose above the average price of the district as adopted in the assessment of the landtax or above the last ten years averages of the nearest markets, since otherwise the risk would be too much increased.

If the Provincial funds get rid of their present stores (of the date of March 31st 1886) at the actual cost price they will have neither suffered loss, since all losses and interest charges are included in that price, nor will they have made any profit, since the profits up to the present time have served to lessen the same.—It is indeed possible, though hardly probable, that with an actual cost price of nearly 6 yen per koku they would still escape without any loss. 5 yen 80

sen as an average for the whole land is a high price of rice.

Table 14.—The grain transactions of the Central fund.—The reports concerning the grain business of the Central fund are far more incomplete than those concerning the Provincial funds. For the Central fund nothing is given beyond the amount in koku and value at the beginning and end of each period; more detailed information about the amount and value of the purchases, the sales, the spoiled rice, the loss through measurement and barter—all these items are wanting. For this reason we can only ascertain the net increase for each period by the difference between the balances at the beginning and end of each period. This I have noticed in the principal headings of Columns 5 to 7, and 8 to 10 of Tab. 14.—The value of a calculation of the average buying and selling prices of rice per koku is thereby considerably diminished, yet I have given the results in the table. For instance the low average of 3.791 yen per koku for the *purchases* during the period 18⁸⁴/₈₅ is doubtless too low; the error arises from the subtraction of the sales during the same year. That is to say, for the Central as well as for the Provincial funds, the sales are marked at the *former*—high—prices of purveyance of the quantities of rice sold, and the real loss connected with each transaction is specially booked under loss. That there were sales in 1884-85, is seen from the mention of 27,500 yen loss on rice sales in the period 1884-85 (cf. Tab 15, col. 5.).

Apart from the undeterminable quantities of larger

purchases and corresponding larger sales, 163,000 koku at .821,000 yen, appear as purchases at an average price of 5.⁴⁵ yen per koku, and 71,000 koku at 363,000 yen as sales at an average price of 5.⁹⁷ yen per koku. 84,000 yen's worth of purchases, the number of koku of which was not yet given at the end of the period under consideration, are left unnoticed.

A computation of the *actual* cost price of the Central fund's rice is the more important on account of the unavoidable incompleteness of this Table 14, which was drawn up by me more for the sake of analogy.

Table 15.—Computation of the actual cost price of the Central funds. The values for this table, drawn up in conformity with Tab. 13, I take as follows:

For Col. 2. from Tab. 15, col. 9.

„ Col. 3. „ Tab. 14, col. 6.

„ Col. 4. „ Tab. 9, col. 9.

„ Col. 5. „ Tab. 9, col. 8.

„ Col. 6. „ Tab. 14, col. 9.

Col. 7. Result of Cols. 2—6 of our table.

Col. 8. Is calculated from Col. 2 plus Col. 7, multiplied by $\frac{1}{2}$, in order to obtain the mean value of the capital invested in rice. From this the loss in interest is put down at 5 percent per annum.

Col. 9. = cols. 7+8 of our table.

For Col. 10. from tab. 14, col. 11.

„ Col. 11. „ cols. 9 and 10 of our table.

To 821,000 yen, the original cost of purveyance, must be added 24,000 yen expenses for the storage of rice, and 95,000 yen for interest on capital. From this the total cost price rises to 940,000 yen. Subtracting the net proceeds from sales to the amount of 220,000 from it, 720,000 yen remain as the actual cost price of stores to the amount of about 92,000 koku.

The following table shows the differences between the real price from this computation and the former booked price, or cost of purveyance.

At the end of the period:	Booked price. Yen.	Average Booked price per Koku. Yen.	Actual cost price. Yen.	Average actual cost price per Koku. Yen.
I. VII. 82 to 30. VI. 83	298,133.963	8.273	305,587.312	8.451
" " 83 " " " 84	524,078.129	6.204	557,223.401	6.596
" " 84 " " " 85	821,114.441	5.045	922,122.709	5.667
I. " 85 " 31. III. 86	458,446.221	5.007	719,726.949	7.970

If on March 31st, 1886, the Central fund had got rid of its rice stores of about 92,000 koku at 7.97 yen per koku, its rice business would from beginning to end have been attended by neither profit nor loss.—On March 31st, 1886, according to Japanese market reports, the wholesale prices in Tokyo for unhulled rice were :
1st. quality. 2nd. quality. 3rd. quality. Hence Average

7.04 yen 6.57 yen 5.80 yen 6.47 yen.

Contrasted with its doubtless too low, *booked* price of 5.007 yen (the former cost of purveyance without the addition of the further charges) the Central fund could on the above mentioned day have sold its rice at about $1\frac{1}{2}$ yen per koku higher than it stands in the books.

Contrasted with its *real* cost price, however, at the above date the Central fund would have concluded with a loss of about $1\frac{1}{2}$ yen per koku. This is in other words what the reports have already announced concerning the Central Agricultural Distress fund's transactions, with their deductions of 142,000 yen "loss on the Central fund's rice transactions." Here too the mistake lies in not following the old method of levelling the price of rice,—it lies in buying rice at a price above the average: in the high cost of purveyance of 8.275 yen per koku in 1882/83. It looks as if the Central distress fund, which began its rice business at about the time when the above mentioned Joheikiyoku was abolished, had taken over its (the Joheikiyoku's,) rice at the high cost of purveyance of the *previous* years of dearth.

It will be of interest to compare the *actual* cost prices of the rice belonging to both the Distress funds with the periodical *market* prices.

At present the Central fund's granaries are situated only in Tokyo, Osaka, and Hiogo, but formerly in Kurume (Chikuzen) and Akamagaseki (near Shimonoseki) as well. For Hiogo the Osaka prices, and for Kurume and Akamagaseki those of the not distant city of Nagasaki will do.

The *Resumé Statistique de l'Empire du Japon* gives the rice prices, up to 1886 inclusive, for those very towns Tokyo, Osaka, and Nagasaki. A very fair comparison price for the Central fund can, therefore, be obtained, with the restriction that the prices differ by six months, on account of the fiscal and calendar years not terminating at the same time. A fair comparison price does not exist for the Provincial funds as well. No publication exists about the prices in all the markets in the country, or about an average price for the whole state for the years in question. Hence the fairest thing for the Provincial funds to do would be, since their purchases and sales are distributed over all the Provinces of the country, to compare their actual cost prices with the means of their own buying and selling prices, and to look upon this mean as the *average market price of the State*.

For this calculation of the mean value I make use of the costs of purveyance in tab. 12, col. 7, and take the *net* selling price of a koku of rice from col. 7. of the table on page 315. The sum of these two prices divided by 2 is given in col. 5 of the table below, as the average market price. (See the table on page 328.)

According to this, the periodical ultimate actual cost price of the Central fund's rice was almost *always higher* than the average market prices of the places where its rice granaries are; and that of the Provincial funds also was with only one exception *always higher* than the average market price for the whole State. Apparently both funds alike have worked with a similar loss.

Period for column 2.	Average Market price in Tokyo, Osaka and Nagasaki. Yen.	Actual cost price at the end of the period of column 6. for the Central Fund. Yen.	for the Provincial Funds. Yen.	Average Market price in the State. Yen.	Period for columns 3, 4, and 5.
1.	2.	3.	4.	5.	6.
1881	9.77	—	8.572	7.016	Jan. 1st. 1881 to June 30th. 1881
1882	8.04	—	6.182	7.116	July 1st. 1881 " " 1882
1883	6.05	8.431	5.566	4.092	" " 1882 " " 1883
1884	5.08	6.596	4.731	4.068	" " 1883 " " 1884
1885	6.18	5.667	5.442	4.093	" " 1884 " " 1885
1886	5.39	7.970	5.800	3.845	July 1st. 1885 to March 31st. 1886
1881/1886	6.75	7.970	5.800	4.189	Jan. 1st. 1881 to March 31st. 1886

It would further be of some interest to us to become acquainted with the varying market prices for a longer series of years, in order that we might form an idea of the prospect the funds have of the recurrence of dearer years in which they could then sell their rice without loss. Statistics of this kind about the price of rice for the years 1868—1886 I obtain from the following sources :

1. For 1868—1874. The accounts rendered by the Finance Minister, OKUMA SHIGENOBU, concerning the real national income and expenditure from Jan. 1868, to June 30th, 1875, published on Dec. 27th, 1879, shows the average settling prices of the rice granaries in Asakusa (Tokyo) for periods of different length. I only use the first 7 periods of about one year each, and leave the last one, of six months only, unnoticed.
2. For 1870—1877 the yearly average prices of rice of all the markets in the Empire were established for every district for the purposes of a new assessment of the landtax, and from them at the time the averages for every district. Neighbouring districts were then joined together and made into larger districts (140 in number). From manuscript notes on these average prices of the 140 districts I select the 3 for the Tokyo, Osaka, and Nagasaki districts.
3. For 1875—1886. The *Résumé Statistique de l'Empire du Japon* gives the rice prices for Tokyo, Osaka, and Nagasaki.

These 3 sources give the prices in paper yen.

Market-prices of rice per Koku, in paper Yen.

Year	Tokyo		Osaka		Nagasaki		Average* from Cols. 2 to 7
	Tokyo	5 rural Districts of Tokyo	Osaka	7 rural Districts of Osaka	Nagasaki	14 villages belonging to Nagasaki Ken	
1.	2.	3.	4.	5.	6.	7.	8.
1868†	5.421						5.421
1869	7.476						7.476
1870	7.448	7.187		7.322		4.963	6.541
1871	4.682	4.323		4.067		3.574	4.046
1872†	3.172	3.960		3.235		2.702	3.168
1873	3.861	5.613		4.640		4.036	4.471
1874	5.917	7.231		7.107		6.918	6.866
1875	5.97	5.978	5.28	5.346	5.14	4.751	5.411
1876	4.76	4.400	4.65	4.138	4.47	3.781	4.367
1877	5.27	5.140	4.83	4.612	5.06	4.769	4.944
1878	6.25		5.40		5.30		5.65
1879	8.00		7.42		6.97		7.46
1880‡	10.52		10.33		9.14		10.00
1881‡	10.51		9.50		9.30		9.77
1882	8.85		7.71		7.55		8.04
1883	6.45		6.30		5.39		6.05
1884	5.40		5.23		4.60		5.08
1885	6.32		6.03		5.68		6.18
1886	6.03		5.7		4.97		5.39
1868 to 1886.....							Average: 6.123

*) In order to avoid laying too much weight on the Tokyo prices, the double entries in cols. 2 and 3 for the years 1870—1874 have been condensed to a single item previous to working out the average (col. 8).

†) The values in col. 2 for 1868—1872 refer: 1868 to 21. I. 68 — 11. II. 69, 1869 to 11. II. 69 — 4. XI. 69, 1870 to 4. IX. 69 — 25. X. 70, 1871 to 25. X. 70 — 13. XI. 71, 1872 to 13. XI. 71 — 1. I. 73. On Jan. 1st, 1873. calculation of time according to the Gregorian calendar was begun in Japan. The choice of the just mentioned irregular fiscal periods was due to the former reckoning of time by lunar months, changes in the commencement of the fiscal year and various incisive administrative events.

‡) The *Resumé Statistique* in an explanatory note adds "The high price of rice &c in the years 1879—1881 was caused by the depreciation of paper-money." This explanation suits 1882 as well.

The general average from the 19 years is 6 yen 12 sen.

Under the 19 memoranda of col. 8 a market price

of 10 yen	appears		once
„ 9—10 yen	„		once
„ 8— 9	„ „		once
„ 7— 8	„ „		twice
„ 6— 7	„ „		4 times
„ 5— 6	„ „		5 times
„ 4— 5	„ „		4 times
„ 3— 4	„ „		once.

A market price of over 8 yen occurred, indeed, three times in the 19 years, but it was caused by the depreciation of the paper money. *From this review the Central fund would have very little prospect indeed of getting rid of its rice at its last actual cost price of 7 yen 97 sen, or at a later time, at a price further increased by interest and granary charges.—*

If from the above average prices of the *chief* centres of trade we should attempt to determine the average price for the whole *State* on the basis of the *assumption* that the average price for the state may have been in each year 2 yen lower—a thing we might feel justified in assuming after a comparison of the statements in cols. 2 and 5 of the table given on page 330—then in all the 19 years a market price of over 5.80 yen, the Provincial fund's actual cost price, would also occur only 3 times, viz. in 1880, 1881 and 1882. The Provincial fund's prospect of getting rid later on of their stores of rice

without loss would be just as remote as that of the Central fund's doing so.

Table 16.—Transactions of the Agricultural Distress funds in government securities.—The method of book keeping with regard to stocks is the same as the one we have been familiarized with above with regard to rice: sales and redemptions are put down in the reports at the *former* cost of purveyance of the stocks in question, and hence the excess obtained from higher prices is booked separately as a profit, and a decrease in price separately as a loss. This has 3 consequences: (1) the average price of the sales (Col. 7) appears too small, (2) that of the redemptions which should always equal 100 appears less than that figure, and (3) the average price of the balance (Col. 12) appears too large.

A. The Provincial funds.—That the average price of the sales are thus very much too small is clearly seen if we compare them with the purchases of the same period, i.e. if we compare col. 4 of our table with col. 7.

We have therefore to find the *net selling* price by a calculation. From the statements on profit and loss on government securities pp. 301 and 302 the net profit from the sale and redemption together of government securities follows as a difference; whilst from cols. 8 and 9 of our table 16 the net profit on redemptions alone does so. Net profit on redemptions subtracted from net profit on sales *and* redemptions together leaves net profit on sales alone as a result.

Thus we obtain :

Period.	Net profit on the sale of gov. securities.	Booked selling price = former cost of purveyance = Tab. 16 Col. 6.	Selling price of gov. securities :		
			Actual, including profit.	Nominal Value.	Hence average price.
1.	2.	3.	4.	5.	6.
Jan. 1st 1881 to June 30th 1881	—	1,467,300	1,467,300	about 2,037,000	about 72.031
July 1st 1881 " " 1882	262,355	21,302,595	21,564,950	32,230,000	66.909
" " 1882 " " 1883	4,727,185	34,905,615	39,632,800	50,650,000	78.248
" " 1883 " " 1884	90,747,205	476,788,957	567,536,162	615,835,000	92.137
" " 1884 " " 1885	32,531,224	171,516,174	204,047,398	213,080,000	95.761
July 1st 1885 to March 31st 1886	62,803,514	255,272,991	318,081,595	317,812,000	100.083
Total	191,076,483	961,253,632	1,152,330,115	1,231,644,000	93.561

The average price thus obtained agrees much better with that of the purchases of the same time. Difference in the months when the buying and selling principally took place, and the different quantities of the various kinds of securities bought and sold are quite sufficient to account for the slight dissimilarity between the two sets of prices.

Period.	Average price	
	of purchases	of sales, including profit
Jan. 1st 1881 to June 30th 1881	about 72.031	about 72.031
July 1st 1881 " " " 1882	74.115	66.909
" " 1882 " " " 1883	77.147	78.248
" " 1883 " " " 1884	92.330	92.157
" " 1884 " " " 1885	93.582	95.761
" " 1885 " March 31st 1886	102.664	100.085

I may be allowed in this agreement to see also a confirmation of the correctness of my assumptions (pp. 301 and 302) with regard to the profits and losses on rice business.

The Provincial funds bought government securities to the nominal value of 8,009,000 yen, sold 1,232,000 yen, had 192,000 yen redeemed, and thus retained a balance of 6,585,000 yen.

According to the cost of purveyance, they bought for 6,836,000 yen, sold for 961,000 yen, had 175,000 yen redeemed, and retained a balance of 5,699,000 yen in government securities.

Their additional net profit on sales amounted to 191,000 yen, and on redemptions to 17,000 yen; their average cost of purveyance was 85.351 per cent, their real average selling price 93.561 per cent, and their redemption price naturally 100 per cent; the average of the former cost of purveyance of the balance in government securities was 86.545 per cent.

The business of the Agricultural Distress funds in government securities was in every way advantageous to them. Not only did they make large profits on sales and redemptions, and, as we see from table 17, obtained good interest on their capital invested in securities, but at the end of the period, they had gained greatly in capital as well, on account of a rise in the value of their securities. A comparison of the bourse quotations at the end of March, 1886 with 86.545 yen, their cost of purveyance, gives the profit which the Funds would have made by realizing the balance at this time :

Price of government securities, End* of March, 1886.

1.)	10 per cent	Capitalized Pension Bonds	110.20
2.)	8 „ „	Temple and Shrine Bonds	103.80
3.)	6 „ „	Bonds for the redemption of Paper-money, interest in silver	104.00
4.)	7 „ „	Pension Bonds	109.00
5.)	6 „ „	do do	104.50
6.)	6 „ „	Industrial-Loan Bonds, payable to bearer	104.00
7.)	6 „ „	Industrial Loan Bonds, registered, ...	100.00

*) More exactly March 23rd. The bourse tables for the 31st are unfortunately not to hand.

8.)	4	„	„	New Public Loan Bonds	98.00
9.)	—			Old Public Loans (no interest)	27.50
10.)	7	„	„	Nakasendo Railway Bonds	111.70

From these 10 kinds of bonds, Nos. 3 to 7, and No. 10 would principally have served as investments, and the bourse price for the whole balance in securities would therefore have been about 104 per cent at the end of March, 1886. Hence profit in capital about 17½ per cent. The additional value of the balance in securities, as contrasted with the booked price, can be set down at 1,150,000 yen in round numbers for that time.

B. The Central fund.—The Central fund's business in securities shows this peculiarity, that *all* purchases and *all* sales, both in nominal value, cost of purveyance, and selling price, are booked *exactly at par*, besides there being neither profit nor loss booked at all.

The investments were in government bonds for the redemption of paper money (“*Kinsatsu-Hikikaye-Kosai-shosho*”) bearing 6 per cent interest in silver. They were sold by the National Debt Bureau at par at a nominal value of 100 paper yen. At the time of their issue they were not much taken up by the public, their interest was lower than that on other kinds of Japanese government bonds. At the time when they were sold again by the Central fund (probably to the National Debt Bureau) their *bourse quotations* may have been *below par*; for instance, at the commencement of 1886 they stood at 97.20.

The investment in these securities seems therefore

not to have constituted a real property in these papers but they seem to have been only assigned by the National Debt Bureau to the Central fund, for a time, in order to procure for it some interest on its funds.

As we see from Tab. 11, B, this investment in securities began at the same time as the Central fund commenced its investment in rice, 1882, it was entirely given up in the period 1885, in order to make way for investment in deposits. As no interest on securities is mentioned for 1885, the sale of the whole, to the amount of 860,200.00 yen, probably took place on July 1st, 1885.

Table 17.—Interest derived by the Agricultural Distress funds from government securities.—The customary rate of interest, in Japan has changed in a remarkable manner during the last few years. We can furnish some proof of this fact by a calculation and comparison of the rates of interest received on an average by the Funds for each period. Table 17 does this for the interest on securities, Tab. 18 for the interest on deposits. The results of both point to the same fact, and are confirmed by the tables already given on the average prices of purchases and sales of the Provincial fund's bonds.

Since in the Provincial funds' manner of bookkeeping only the interest really *due* and received is posted, and since no account is taken of interest already accumulated in some previous months, but contained in the next coupons, the rates of interest calculated for the first period of only 6, and for the last period of only 9 months, may have been too high or too low.

From Jan. to June, 1884 the rate of interest on the investments was always over 9 per cent, in 1884-85 it sinks to about 8.4 per cent, and from 1885-86 it sinks still further to less than 6 per cent.

The Central fund did not realize so high a rate of interest as the Provincial funds did :

	Central fund.	Provincial funds.	Surplus of latter.
1883-84	7.390 per cent	9.218 per cent	1.828 p.c.
1884-85	6.891 per cent	8.422 per cent	1.531 p.c.

But as the Central fund has only possessed government securities since 1883, and thus its rate of interest cannot appear increased by purchase at the lower prices of previous years, as those of the Provincial funds, it is fairer to compare only the *increase* of the year 1883/84 and its rate of interest with that of the Central fund. If we complete this calculation we shall find that, with regard to the *increase alone*, a rate of interest of 8.149 per cent corresponds, as against 7.390 for the Central fund, or that 0.759 per cent more was realized by the Provincial than by the Central fund.

For 1884-85 the rates of interest on the *increases* cannot be compared, since the Central fund despite its increased investment of capital derived less profit from it. This is to be accounted for by the fact that the Central fund drew its interest in *silver*, the *agio* of which sank.—The Provincial funds' increase for 1884-85, if considered by itself, did not yet realize more than 5.924 per cent.

Table 18.—Interest derived by the Provincial Agricultural

Distress funds from deposits.—The amount of interest derived from deposits is indeed given in the reports, but the capital invested in deposits is included in one sum with the cash. The *rate of interest on deposits* in col. 6 thus seems smaller than it really was.

Apart from the first six months of the funds transactions, the interest from deposits and cash was always above 3 per cent, in the period 1882-1884 even above 4 per cent, the highest point was reached in 1883-84, when it was $4\frac{1}{2}$ per cent.

The same increase and decrease of the rate of interest on deposits was also marked by the rates of interest allowed by the Post Office Savings Bank to its depositors, for such periods. We therefore give these latter rates of interest as a note in col. 7, although the Provincial funds did not deposit their funds, which they wished to be kept available at any time, in the P.O. Savings Bank. They were probably deposited in the provincial banks. From the point of view of fostering the circulation of money in the provinces, this latter method is indeed to be recommended if the banks chosen offer a full guarantee of solvency.

If the banks gave the same rate of interest as the P.O. Savings Bank, then about 55 to 60 per cent of the item "Deposits and Cash" must have consisted of fixed deposits, and about 45 to 40 per cent of deposits must have been withdrawable at any time, or have been cash.—

A table concerning the interest on the *Central funds*

deposits I have not drawn up, since Deposits appeared in the Central fund in the last 9 months only.

On March 31st, 1886, the Central fund had deposits to the amount of 2,112,000 yen, and during the last 9 months had received 74,000 yen interest thereon. Of the deposits 1,703,291 yen came from capital formerly invested in government securities or from cash. I take it for granted that this amount bore interest the whole 9 months. From capital formerly invested in rice came 278,273 yen, and 131,647 yen from new surplus accruing during the period. The sum of these two amounts, 409,920 yen, will not have borne interest from the commencement of the period; so I will only take the half, 204,960 yen.—Under these assumptions the rate of interest on the Central fund's deposits is 5.186 per cent per annum, and therefore higher than that of the Provincial funds calculated above at 3.272 per cent. The latter, however, as we have already said, appears smaller than it really was.

Table 19 A. and B.—The property of the Provincial and Central funds together and the manner of investing it, on March 31st, 1886.—

A. *According to the reports.*—The property of the Provincial funds put down in the last of the six reports amounts to 7,839,000 yen, and that of the Central fund to 2,712,000 yen; whence a total property of the whole system of Agricultural Distress funds of 10,551,000 yen.

B. *Completed by the balance of the loans.*—As I already said in the discussion on tables 7 and 8, the

outstanding balances of loans granted by the Provincial funds to indigent farmers, as a help for the payment of the landtax, must be looked upon as assets. On March 31st, 1881, they amounted to 663,000 yen. With their addition the total property amounts to over 11,214,000 yen.

A completion by means of the *insertion of the market prices* would increase the given figures of the property by almost 1½ million yen. The property list in the reports is therefore doubtless drawn up in a most solid manner.

As I showed in the discussion on tables 12 to 17, the prices given in the reports concerning rice (the former purchase prices) correspond neither with the actual cost price nor the market price, nor do the price of government securities correspond with the bourse quotations.

The booked prices of *rice* amount to only 3.722 and 5.007 yen per koku for the Provincial and Central funds respectively. In Tokyo the average *market* price on March 31st, 1886, the day of settlement, amounted to 6.47 yen (Cf. page 326). The 91,567 koku of the Central fund stand thus about 1.463 yen, or *in toto* 133,963 yen too small in the books. For the whole State the average price may have been about 2 yen lower, viz. about 4.47 yen. In that case the 220,778 koku of the Provincial funds stand 0.748 yen per koku, or *in toto* 165,142 yen, too low in the books; thus the Central and Provincial funds' *rice stores* together are booked about 300,000 yen in round numbers too low.

We showed above in our remarks on table 16, by means of a money market return, for the end of March 1886, that the average bourse quotation of the government securities in the hands of the Agricultural Distress funds at the end of the period under consideration, was 104 per cent, i.e. 17.455 per cent higher than the price at which they were booked. Consequently the funds balance in *government securities* was worth about 1,149,000 yen more than according to the booked price.

IV.

Results.

An important result of our manifold investigations of the figures of the reports may consist in our becoming thoroughly acquainted with the doubtful value of rice storage as a profitable investment of property. From a more exact calculation of the *actual cost price* of rice we saw that, at the end of the period it amounted approximately to :

	<i>yen.</i>
With regard to the Provincial funds	1,280,000
„ to the Central fund	<u>720,000</u>
or together	2,000,000
In contrast with the booked	
prices of	<u>1,365,000</u>
this gives a difference of	635,000

Even if we suppositionally put the higher market price of March 31st, 1886, with an extra 300,000 *yen* in the place of the booked price, a sum of upwards of 300,000 *yen* is still to be regarded as a loss up to the said date.

Thus the point of view of *profit* does not by itself suffice to recommend the retention of rice storage. Let us examine what other points of view may be alleged in its favour.

They would chiefly be the following two: that of protection against famine, and that of a levelling influence upon the price of rice.

The two points of view differ materially with reference to the Central and to the Provincial funds. At the chief centres of trade, where the Central fund's rice granaries are situated, rice importation and exportation of commercial character will be able to effect more efficiently and more cheaply an equalization of prices and a protection against famine. It therefore appears to me that it were advisable for the Central fund to give up its rice business. Quite a number of the Provincial funds are situated in places which are equally convenient for the importation and exportation of international commerce. For these I fail to see the necessity of continuing the storage of rice unless it be that the said ports not being open, a deplorable barrier will thus be made between them and the attentive desire of the world's commercial enterprise. For these and for all such places as do not yet partake of all the advantages of steamship and railway connections, and also for those, for which the modern development of traffic does not yet fully exist, the remodelling of the old agricultural conditions is still incomplete, and in my opinion they still require the rice storage which for centuries has been preserved under the former agricultural conditions as a protective measure against famine; and for the influencing of the price of rice in a levelling direction.

For such funds as continue to carry on the business in rice, however, a stricter observation of the old method of price levelling seems imperative, to avert greater losses; they should pay attention to the average price of their locality, taken for many years; they should buy the bulk of their grain in years when the market price is 25 to 30 per cent below the said average, they should only make other purchases for the reduction of their actual cost price, as long as these purchases are still below the said average price; further, they should be guided in their sales by three points of view: (1) that of getting rid of that part of their stock of rice which appears to be of doubtful durability, (2) that of effecting voluntary sales only at a price which exceeds the mentioned average price of their locality, and (3) that of not exhausting the whole of their stores even by such profitable sales, so that they may have some stock to fall back upon against the possibly still higher prices of years of distress.

If the funds still retain their accustomed method of book-keeping for the grain business, it would be advisable for them, in order to enable them to form a judicious estimate of their own standing, to give for the close of each period in their reports to the ministers the results of an exact calculation of the absolute, as well as of the average, actual cost price of their stores of rice, besides giving the market prices ruling in their respective towns on the said day.

For the balance of *securities*, as well, the statement

of the result of the calculation on the basis of the *actual bourse quotations* should be demanded for the final day of the period reported, in addition to the usual statement. To attain the desired uniformity each of these fund administrations could, having regard to its nearest stock exchange, each time be informed by the finance ministry as to the bourse quotations to be applied in the calculation of the values of the different government securities.

The value of the reports would further be materially increased if the profit, as well as losses, arising from rice were *separately* stated from those arising from government securities. A separation of cash and of the different kinds of deposits could also easily be effected, as well as a statement with regard to the rate of interest on each kind of deposit.

If the Central fund gave up its rice storage business, it would have to be considered afresh, according to what principles it will regulate its investments. Certainly the point of view of the highest interest must not be prescriptive any more for the Central Agricultural Distress fund than for an Imperial War fund. For highest interest demands fixed investment, and fixed investment runs contrary to the real purpose of the fund of being in readiness to meet sudden widespread distress. Whilst this latter reason precludes an Imperial War fund from any investment whatsoever, and strictly imposes upon it the character of a specie treasure, more time elapses between the occurrence of

the misfortune arising from the elements, and the claims on the Central fund. The statement of the want, and the exhaustion of the Provincial funds require some time. Hence it would suffice were the Central fund to keep about $\frac{1}{5}$ of its property in readiness in the form of deposits withdrawable at any time. And this will in all probability be sufficient for all the disasters which only affect individual provinces. At times of calamities which devastate the whole country, calamities as are recorded in history, which have befallen Japan more than once, the case is different. Be they bad harvests in consequence of drought, wet, too long a spell of cloudy weather, the general distress resulting therefrom can be anticipated some time before, and leaves time for the serving of the notice with regard to deposits fixed for 3 or 6 months. Even those deposits paying the highest interest and fixed for a whole year, are, however, available if care is only taken to distribute their times of expiring over the whole year with intervals of two weeks between each. For the strengthening of the always available means in case of very sudden, unforeseen disasters (typhoons, earthquakes, plagues of insects, &c.) we should like to see use made also of investment in government securities. These would, it is true, cause a considerable loss of capital, in the case of an excessive sale taking place in the limited bourses of the country. But considering the very rare occurrence of such entirely sudden great disasters, at periods very remote from each other, the previously drawn higher

amount of interest from government securities will probably have more than compensated this loss in capital. Moreover the loss in capital is only to be feared as long as Japan remains outside the international money market. If she has only efficiently introduced to the world's exchanges her government securities, which from the good management of her finances, (as I explained in my papers on the Japanese National Debt, 1878), would hold a high place among the securities of the various states, if she has done this, I repeat, and has accustomed the foreign exchanges to speculate also in Japanese securities, such a fall of prices as the result of national calamities is no longer to be dreaded.

It is to be regretted that the reports have, hitherto, been so strictly confined to the money matters of the Agricultural Distress fund. It would be an important and welcome completion, if they also gave information concerning the number of families and persons relieved, as we have done above, and thus afforded a still clearer proof of the beneficial agency of that system of Agricultural Distress funds peculiar at the present to Japan alone.

V.

The Treatment of Agricultural Distress

in

other States.

Some notes on the treatment of Agricultural Distress in other states may be of interest.

In *British India*, a few years after the great Bengal famine of 1877, "famine relief funds" were established by the government: it may be that that cause alone, without any reference to the Japanese institution, called them into being, or, it is possible that the stimulus came from here. The latter is not improbable, for one of the Viceroy's secretaries was staying as a guest at the British Legation in Tokyo at the same time that the Finance Minister OKUMA, in his remarks on the budget for 1878-1879, had already published his plan for the establishment of an Agricultural relief fund and had appropriated 1,200,000 yen for that purpose. This secretary utilized his leave, among other things, in making a careful study of the Japanese landtax regulations.—We may mention that the East Indian budget for 1887-88 has suspended the contributions to the famine fund.

The Landtax deficiency funds in *France*, *Westphalia* and *Rhenish-Prussia* have been already shortly mentioned above. From the "Directions as to the method to be

observed in disposing of the Landtax deficiency fund etc," decreed in execution of the Landtax law for the western provinces of Prussia, of Jan. 21., 1838, the paragraph 8 deserves special attention. It shows that these Prussian provinces are far from possessing such an efficient institution as Japan. There we find "The deficiencies, arising from a failure of the crops or other causes, extending over the whole District or a great part of it, cannot as a general rule be taken into account, since the remission of taxes depends upon the means at the disposal of the deficiency fund."

The *Italian* Landtax law of March 1., 1886, which represents the *latest* Landtax reform in Europe, does not provide for the establishment of a Landtax deficiency fund. However it enacts in art. 38 that :

"When there is a loss of at least $\frac{2}{3}$ of the ordinary produce of the land, arising from disasters not foreseen in the assessment of the tax, the finance ministry can authorize a reduction of the tax for the current year.

"Care will be taken to provide special legislative measures, in such extraordinary cases when severe disasters, to which no regard has been paid in the assessment, should happen to certain farming zones or branches of agriculture."

Special legislative decrees, like those which are intended by Italy for the future, have in the past been enacted, as for instance: in *Austria* during the *failure of the crops* in Hungary through *drought* in 1863, and in *Switzerland*,

where after the *inundations* caused by the Rhine in 1868 assistance was granted by the cantons.

In *Prussia* too no permanent item in the budget provides for agricultural distress, here too special legislation is resorted to: Aid accorded to *East Prussia* after the *failure of the crops* in 1867 through *wet*; law of July 22., 1876, for removing the devastations and public dangers caused by *floods* in the spring of 1876 (6,000,000 marks); and assistance in the distress in *Upper Silesia* 1879, caused by *inundations* and failure of the harvest (law of Feb. 3. 1880, 6,000,000 marks from a loan.). The last mentioned Prussian law served the temporary purpose of combating the distress in its momentary symptoms by placing means such as food, fodder and seed corn, the two last on condition of repayment, at the disposal of the sufferers; as well as by procuring employment for the sufferers. For the further, more comprehensive task, of permanently bettering the distressed district in its agricultural conditions, the law of Feb. 23., 1881, placed the sum of 16,000,000 marks at the disposal of the government. I may be allowed to mention, that only the tasks allotted to the former law alone (but with the exception of giving employment) devolve on our Distress fund here.— In this connection must also be mentioned the law of Jan. 21., 1883, concerning the grant of State funds (3,000,000 marks) to meet the devastations caused in the Rhine river district by *floods*, in the latter part of the autumn 1882 and in the winter of 1882-83, and

more especially that clause of it, which empowers the government to grant sums of money to individual sufferers, in order to keep them housed and provided with means of sustenance, the sums to be in proportion to the authenticated want, and to be granted with or without the condition of repayment.

To me such laws appear to be a serious charity injustice !

For what distinction is there between losses caused by the overflowing of the Rhine, and those caused by numerous other rivers which being smaller naturally cause smaller floods? It is only the greater *number* of the distressed which appeals to the *heart* of the legislator, whilst—according to the Prussian Agricultural Minister's own words—"on the course of almost every river in Prussia agriculture suffers enormous losses every year." Selecting one more example, and mentioning a less known stream, what is the difference between the districts submerged under *Feetzel* water, from those *overflowed* by Rhine water ?*

* In the Report of the Minister for Agriculture, Crown-lands, and Forests to H. M. the Emperor and King "*The Agricultural administration of Prussia in the years 1881, 1882 and 1883*" we find on page 374 :—"The valley of the *Feetzel* below Salzwedel suffers by being very marshy, and is inundated after even moderate rain falls. In the years 1877, 78, and 79 the harvests on these low lands were almost entirely lost; the damage thus caused being estimated by experts at 240,000 marks per year, or in 3 years at 720,000 marks."

With regard to the *inundations*, the same Report, p. 346, says :—"From all the provinces in Prussia complaints have poured in about the uncared for state of the beds of rivers, and about the enormous amount of *damage* suffered by agriculture *every year* on account of this." After a very explicit and well authenticated report (p.p 366-383) the Minister sums up the described circumstances in the following words :—"The waters, not being taken

As a reason for the non-assistance of the State, in cases of smaller inundations like these, might be given that with them aid from the neighbourhood is easier. But even in the case of such smaller losses, from half a million marks, the sufferers will only have been indemnified to a very small extent by local aid. Why should sufferers by the overflowing of the Rhine be relieved by the State, and those by smaller rivers not? The latter are as good citizens as the former. Here, evidently, a legislative *injustice* is committed, an injustice, which can only be avoided by a permanent institution, which year after year extends its help *without interruption*, whether the distress affects 1,000 or 100,000 families.

Such an institution is possessed by Japan in its system of Agricultural Distress funds, and it may feel assured that this will be imitated by other States. Justice, the necessities of the farmers, and the rules of finance,* demand it

care of at all for comparatively long stretches, very often fail to flow along, and make the valley marshy; innumerable mill dams, constructed without any plan, in rivers of the plain, having but a slight gradient, increase the evil; breaks in the banks, and silting year after year injure extensive districts. Such circumstances, hurtful to cultivation, exist in all provinces, and within them more or less on nearly *all water courses*; they *extend altogether over very extensive areas, and inflict enormous losses every year upon our agricultural industry.*"

*) The Distress fund, as a permanent State institution, would change a financial need, which is not regular now, but which frequently re-occurs with times of general distress, and which then has often been covered by loans, into a regular one, covered by taxes; this certainly would be a "progress to solidity" in Finance. Cf. A. Wagner. *Finanz-Wissenschaft* I. 3, § 73, note. "Therefore it must certainly be termed a more solid practice, if at least part of the war cost and other extraordinary expenses (for instance those for *public distress*) are paid by *taxes* or *only temporarily* by *floating* debts, which are to be paid back as soon as possible from the revenues."

in equal measure. The need in Europe must be quite the same as in Japan, for wherever "Agriculture" is pursued there must be injuries to crops.

It will be fully sufficient, if, in order to give a quantitative measurement, we cite Prussia and Germany alone, as examples taken from the European states.

Of the 54,907 communities and rural districts of the State of Prussia were damaged in an uninsurable manner:*

By	1878.	1879.	1880.	To- gether	Yearly Average	
					Number	Per- centage
1. Cold and Frost	3,336	2,027	17,894	23,257	7,752	14.12%
2. Drought	902	1,463	1,505	3,870	1,290	2.35 "
3. Rain and wet	965	6,178	8,605	15,748	5,249	9.56 "
4. Inundation	391	1,532	1,844	3,768	1,256	2.29 "
5. Plant diseases and noxious plants.	1,060	1,562	945	3,567	1,189	2.16 "
6. Noxious Animals	3,805	5,949	1,553	11,307	3,769	6.86 "
7. Other Injuries	4	3	5	12	4	0.01 "
Total :	10,463	18,714	32,352	61,529	20,509	37.35 "
Percentage of the no. of communities and rural districts	19.06%	34.06%	59.92%	112.06%	37.35%	

*) Nos 1. to 4 I take from the "Jahrbuch für die amtliche Statistik des Preussischen Staates," 1883 p. 200; Nos. 5 to 7 from the "Statistische Correspondenz des Preuss. Stat. Bureau's," 1881. L. I can not exclude from No. 6 the damages done by the *phylloxera*. In the following period, 1881-83, there were only 12 centres of infection. Cf. No. 28 of the table below on injuries to the crops in Prussia caused by noxious animals during the Years 1881-1882 and 1883.

In Prussia, as well as in Japan, we see that the things doing most damage change with the years. In 1878 the greatest number of injured communities suffered from *noxious animals* (3805); in 1879 the majority from *rain* and *wet* (6178); in 1880 from *frost* and *cold* (17,894); and in 1881,* we might add, by drought (5628).

In the period under consideration frost and cold caused the most damage (yearly average 14 per cent of all communities and rural districts); next come rain and wet (yearly average $9\frac{1}{2}$ per cent); noxious animals (almost 7 per cent); drought, floods and noxious plants, all about equal (each about 2 per cent). In the 3 years 61,529 communities in all suffered from injuries to their crops, i.e. a yearly average of 37.35 per cent of the 54,907 communities and rural districts in Prussia.

There are no statistics as to how many farmers were affected by the injuries done in the 61,529 districts, or what amount in money the damage came to. Still some notes can throw some light on the importance of the damage. In the "Statistische Correspondenz" 1881, LI. we read: "Information as to the amount of the damage caused by *frost* and *cold* is wanting; still the assumption is not unjustifiable that, particularly in the year 1880, the rye which in some parts of the country was already fairly developed at this time (18th, 19th and 20th of May) has *almost entirely failed*".....But

*) 1881, injured by frost and cold 4415, by drought 5628, by rain and wet 2055, by floods 409. Cf. Preuss. Stat. Jahrb. etc. l.c.

rye is the staple cereal not only in Prussia generally, but also in most of her provinces.

With reference to the enormous amount of damage caused annually by *inundations*, I have already quoted the words of the Prussian Minister. To call to mind the great variety of species of *noxious plants* and *animals* in Germany, I will further make a list of the notes for 1881—83 given in the agricultural report for that country (pp. 358 and 359).

Concerning the amount of the harm done by noxious animals, insects and plants, I will remind the reader of the Colorado beetle and the phylloxera; by the latter (in connection with frost, it must be added) upwards of 859,000 hectares of vineyards were utterly destroyed in France in 1879 and 1880.* But even less frequently mentioned noxious animals, insects and plants any way inflict considerable damage on *individual* farmers. The *noctua graminis*, which usually is an inhabitant of more northern countries only, and which is the cause of permanent local calamity in Siberia put in a passing appearance about 20 years ago in the neighbourhood of Berlin; did the same in Thuringia in 1881 in an alarming manner, and also in the year 1883 visited the meadows of the Aland, Elbe, and Garbe, devastating them by completely eating up, within three weeks, about 500 hectare of hay fields, avoiding the weeds, and feeding on the good grass

*) Stat. Corresp. 1885. XIII.

and herbage alone.* (See No. 24 of the following list).

It cannot be doubted that these agricultural *injuries*, which took place in 61,500 districts, in tens of thousands of cases meant agricultural *distress*.

That distress among peasant proprietors was to be assumed to exist in a great part of Germany, was shown by a resolution of the German board of agriculture, as early as Feb., 1884.†

Distress is there, the relief fund is not! To what extent the alleged distress depends on injuries to the crops, might perhaps be ascertained if in Prussia there were statistics of the indebtedness of the landed property and its *causes*, or statistics on the *causes of compulsory sales*. The latter has, indeed, been undertaken, but the results are not yet known.‡ I therefore fall back on corresponding statements for *Baden* and *Bavaria*.

*) The above quoted report of the Minister for Agricult., p. 361.

†) Interesting evidences that the Prussian peasants have lost, during the last decades, considerably in numbers is furnished by A. von Miaskowski. Ueber landwirthschaftliche Enquêtes. Schmoller's Jahrbücher IX. 920.

‡) During the last correction of the proof sheets these statistics have come to hand, after all, and are briefly referred to in some of the notes on the following pages: 1. The Mortgage movement in Prussia during the financial year 1886-87. 2. The causes of compulsory sales of field and forest lands especially, in Prussia, during the financial year 1886-87. 3. Concerning the economical signification of agricultural compulsory sales, by G. Evert,—in Vol. III, IV. 1887 of the Zeitschrift des Königlich Preussischen Stat. Bureaus.

Injury of Crops by noxious animals, insects and plants, in Prussia, 1881, 1882, and 1883.

Noxious animals, insects and plants.	Location.	Statement of the Report.	Year.
Weeds. 1. <i>Kaplanus raphanistrum</i> 2. <i>Galinsogea parviflora</i> 3. Groundsel, <i>Senecio vernalis</i> 4. Chickweed, <i>Vicia cracca</i> 5. <i>Chrysanthemum segetum</i>	Prov. of Saxony " Hannover " " " "	Extremely obnoxious Obnoxiously " " Has appeared very much in various localities	1883 1882 " " 1883
Fungi and mildew. 6. <i>Sphaceloma ampelinum</i> 7. <i>Oidium Tuckeri</i> 8. <i>Peronospera viticola</i> 9. Blight, <i>Puccinia graminis</i> 10. Potatoe-fungus, <i>Peronospera infestans</i> The same	Vineyards of Rhenish Prussia and the Province of Hesse Nassau " " Hohenzollern and Hess. Prussia Hohenzollern Several districts in Hannover.	Vigorously attacked " " Frequent appearance - Appeared " "	1883, 84. " " 1882 1882 1883
Noxious Insects and Animals. 11. Cockchafers 12. Field-mice " "	Vicinity of Hildesheim (Hannover) Posen Some distr. of the prov. of Hannover Surroundings of Cassel, and in Silesia	In an injurious quantity Considerable injuries " "	1881—83 1881 1882 1883

13. Graue Erbsenkäfer	Some parts of the prov. of Brandenburg	Very injuriously appeared	1881
14. Rapsglanzkäfer	"	"	"
15. Thrips cerealeum,	Prov. of Posen	Complaints	1882
16. Wire worm	Root fields of prov. of Posen	Suffered	"
17. Cockchafer grub	"	"	"
18. Snails	Some vicinities of Hannover	Considerable damages	"
19. Anthompsia conformis	Hohenzollern	"	"
20. Plusia gamma	Root fields in Schleswig Holstein	Severely visited	1883
21. Shield-beetle, Cassida nebulosa	"	"	"
22. Small-beetle, Atomaria linearis	Root-fields of some distr. in Hannover	Appeared	"
23. Hessian-fly, Cecidomyia destructor	Distr. of Cassel	"	"
24. Noctua graminis	Aland, Elbe and Garbe-meadows	Appeared to some extent	"
25. Blood-louse, Aphis lanigera	Fruit-trees of Brandebourg and some distr. in Hesse-Nassau	Visited devastatingly	"
26. Tortrix Pilleriana	(Wine producing districts of the Rhine-valley and in Rhenish Prussia	Strongly appeared, checked	"
27. Tortrix ambigua	"	Frequent occurrence	1881. 1882
28. Phylloxera vastatrix.	Distr. of Ahrweiler 7 centres of infection, near Erfurt 2, near Bonn 3.	Complaints	1881 82. 83
		For making experiments, for exterminating and disinfecting and for losses from 1881—1883 194,653 marks were applied.	1881—83.

For *Baden* the statistics of the compulsory alienation of real property (1883),* consider 10.4 per cent of the cases concerning the farmers, as caused by “*natural events* such as bad harvests, inundations, conflagrations.”

“The principal cause of the high indebtedness is regarded by the reports (of the Baden agricultural enquiry) to be the rapid succession of a *series of bad harvests* by which the second half of the seventies was distinguished in a particularly high degree. To this must be added the fact, that in several parts of the country the losses of property which arose in consequence of poor harvests, have been further increased by *other events* of the *elements*. Thus in some places by *repeated inundations*, in others by *hail storms*, but most of all by destruction caused by the severe *cold* of the winter of 1879-80 among vines and fruit trees.” †

Schäffle in his “*Incorporation des Hypothekarkredits*” gives figures to the point as to the causes of the peasant compulsory sales 1880 in Bavaria. He says (p.p. 3 and 4): of 6686 compulsory farm sales, 586 were caused by natural events, and of these 242 such sales from misfortune in family, household and *livestock*; 210 from *failure of the crops* and *decrease of farm produce*; 130 from *inundations, drought, fires and hail*.

If we consider those cases where in Schäffle's Bavarian statistics the *real cause* of the indebtedness

*) Cf. Stat. Mitth. über das Grossh. Baden, Vol. IV., No. 12. 1885; or extract from it in the Statist. Corresp., 1886, XLIII.

†) von Miaskowski, l.c. page 950.

is *not* given, viz. overburdening with rents and annuity charges (675 cases), relentlessness of creditors (407), usury (330) and promissory notes (118), in all 1330 cases, there only remain 5156 statements of causes, and of these cases the 586 compulsory sales through misfortune constitute 11.3 percent;—a result very nearly resembling that obtained for Baden viz. 10.4 per cent.

We are certainly not making an over-estimate if we make the natural elements responsible for $\frac{1}{10}$ of the cases of ruin, for $\frac{1}{10}$ of the cases of indebtedness, for $\frac{1}{10}$ of the agricultural distress. In *Prussia* the latter lead to 9855 sheriff's sales in 1881, to 8583 in 1882 and to 7162 in 1883, chiefly of real estates devoted to agriculture and forestry.*

The natural causes of agricultural distress which are as such always connected with agriculture, join in different countries, with different secondary causes.

The principal difference between the countries of Europe and Japan lies in the fact that in Japan the effect of the high and fixed money land tax is the chief secondary cause which makes the distress more acute; in Europe, however, agricultural distress, arising from the unavoidable occurrence of bad harvests,—joined to many other changeable and remediable causes,—arises secondarily from the development of the enormous transport

*) See the frequently quoted Report of the Minister, &c, page 10.—In 1887/6 it lead only to 2835. Of the 5469 stated causes given there, natural events and agricultural reverses with 338 specifications only constituted 6.18 percent of the total causes. *Ztschr. d. K. Pr. St. B.* 1887, III, IV. 206, 207.

facilities of modern times, a development which must be *accepted as irremediable* for all time. The explanatory reason given for the wretched condition of landed property which has been so much before the public since the time of *Rodbertus*, viz. indebtedness for dowries, pensions to parents and purchase money, has formerly also influenced European agriculture already without leading to a crisis. The development of the means of transport is the *new* element of transformation as of the general economy of the nation so of agriculture in particular.

I will dwell for a moment upon this assertion and its corroboration, since from it there results an inference for the treatment of distress as at present existing in Europe and for that which will exist in Japan in the future.

Formerly *when the crops failed* the European farmer could cover his losses by higher prices, whilst now free international intercourse equalizes more and more the prices in years of good or bad harvests, nay, it can even make the prices in bad years lower than those in good ones.

One example out of many. Taking into consideration the different amounts of land under cultivation, the grain produce of the harvest of 1883 expressed in percentages according to that of 1878, in *Prussia* amounted to this :

Percentage of winter rye to 76.5 per cent.		
„	„ oats	„ 62.7 per cent.
„	„ winter wheat	„ 74.8 per cent.
„	„ summer barley	„ 69.7 per cent.

Now the value in cash for 1883 amounted to, as per table on the following page.

For	The harvest, in Tons of 1000 kg.		The year's average price for 1000 kg. in Marks.		Hence cash value in Marks.	
	1878	1883	1878	1883	1878	1883
<i>Winter rye</i>	5,007,765					
<i>Summer rye</i>	98,355					
<i>Rye</i>	5,106,020	3,906,105	143	147	730,160,860	574,197,435
<i>Oats</i>	3,395,482	2,128,967	139	137	471,971,998	291,668,479
<i>Winter wheat</i>	1,494,503					
<i>Summer wheat</i>	68,460					
<i>Wheat</i>	1,562,963	1,169,096	202	185	315,718,526	216,282,760
<i>Winter barley</i>	87,381					
<i>Summer barley</i>	1,255,693					
<i>Barley</i>	1,343,074	936,123	157	146	210,862,618	136,673,958
For the 4 cereals, total, ...	11,407,539 = 100%	8,140,291 or 71.4%			1,728,714,002 = 100%	1,218,822,632 or 70.5%

From that table we see that in 1883 the amount in quantity of the 4 principal cereals amounted to 71.4 per cent, and the cash value to 70.5 per cent of the results of 1878. With a harvest 3,267,248 tons less than that of 1878 the Prussian farmers could by no means cover their losses by higher prices, but experienced a falling off of 509,891,370 marks. Nobody will deny that this must be considered as an effect of the facility and cheapness of possible importation of the above mentioned cereals from abroad (especial from Russia, Austro-Hungary and America).^{*} What keeps the prices down is not merely the actual importation, but also the knowledge that if a higher price is demanded the order will go to a foreign country.

A *displacement* in national economy disadvantageous to the European agriculture has taken place by the development of the means of transport; disadvantageous so long as a counteracting organization has not been hit upon: the non-agricultural part of the population is now the gainer *every* year, whereas formerly it had sometimes to buy at high and sometimes at low prices, but always from the same purveyor, its own farmers; now it buys at *cheap* prices every year, in times of good harvests from its own farmers, in bad ones from foreign ones, or at any rate compels native

^{*}) In 1883, the additional supply for Germany (import minus export) for the said 4 cereals amounted to 1,783 001 tons, and, minus the wheat needed for manufacturing the excess of the export of wheat flour still to 1,666, 844 tons. Cf. the Report of the Minister, &c, p.p. 19 and 20.

farmers to concede the lower price of the world markets to prevent the threatened importation.

That this is at the same time a progress, that it signifies the obviating of famines, does not here concern us. From the justified view of agriculture it is a disadvantage all the same.

In order to correct this *displacement* in national economy, European agriculture had to organize itself differently on its business side: either to *save* money against bad times during years of prosperity, or to incur debts during years of depression to stand over till good times. Practically speaking, for decades the latter has been and still is done,* since they *have* got organizations for contracting debts, but apart from cattle, hail and agricultural fire insurance, and the *general* facilities for saving, there are no separate agricultural organizations which would save up the proceeds of good years for agriculture against bad ones.†

*) In Prussia, for instance, there were in 1886—87 624,000,000 marks of newly registered rural mortgages and land debts, against 491,000,000, marks of cancelled ones, so that for this one year there was a balance of 133,000,000 marks of new registrations. Zeitschr d. k. Pr. St. Bur. 1887. III. IV. 192.

†) Up to the present, European political economy altogether lacks Agricultural Distress reserves in their two most simple forms viz. agricultural Distress funds, and agricultural insurance. The *savings* from good years into bad ones, the *reserve capitals*, are uncommonly small in hail and cattle insurance. The reserve capitals (as distinguished from reserves for law-suits, for regulation of injuries and of premiums, and also as distinguished from the enterprise and guarantee capital) at the end of 1884 in Prussia amounted to only 479,000 m. in all the mutual cattle insurance companies; in the mutual hail insurance companies to 1,886,000 marks, and in the joint stock companies for hail insurance to *minus* 1,651,000 marks. See Brämer, Zeitsch. d. k. Pr. Stat. B. 1886, 73—128.

Japan in her Agricultural Distress funds possesses at least one such special organization adapted to agricultural wants.

In every European State a wide field of beneficial efficacy would be open to a like system of relief funds, in the same way as they are in Japan. Here during the short period of 5½ years the Agricultural Distress fund has relieved about half a million families and 3.8 millions of individuals at a total cost of 2,500,000 yen (or inclusive of loans for the payment of the land tax, over 3,250,000 yen); and at the same time has accumulated property to the value of 11 to 12 millions of yen for future greater distress.

To counteract the influence of the enormously increased modern capabilities of transports, and to remedy the derangement arising therefrom to the disadvantage of agriculture, several of the states of Europe have now established protective tariffs for agriculture.* Here is the counteracter. But it is still not sufficient for agriculture.

As Japan contributes a yearly sum *from the land tax revenue* to the Agricultural Distress fund, on the ground of the proved co-influence of the too high land tax on the rise of distress; in the same way in Europe state endowments for the recommended relief funds should be possible from the revenues of *agricultural transport*

*) Per ton: Wheat, Rye, Oats, Barley, &c.					
Germany,	m.	50	50	40	22.5 „
France,	fr.	50	15	30	15 „
Italy,	lire	50	50	40	50 „
Sweden,	crowns	25	25	10	25 „

duties, that is, from the protective tariff revenues, on the ground of the proved influence of the development of the means of transport which is so disadvantageous to agriculture.* Such *direct appropriation* of a part of the means thus obtained *to the assistance of the peasantry and of the small land proprietors* in their struggle for existence would also be justified by the fact that protective tariffs indeed benefit the large landowner, but are of but little help to the peasant, and least of all to the small proprietor, whose *surplus* produce for the market is very insignificant.

The more Japan incorporates herself into the system of international intercourse the more will she need autonomy in her customs. The present restriction by her foreign treaties to impose an only 5 per cent import duty will later on have an ill effect on her agriculture, and will prevent her from applying still more abundant funds than hitherto for lightening the burdens of her peasant population.

If Japan has taken the lead of other countries with reference to her Agricultural Distress funds, she has reason to hasten after them in the province of insurance. Of this in the next chapter.

*) The Prussian law of May 14th, 1885, indeed diverts part of the revenues from agricultural protective duties towards the Communal Unions, but not particularly in favour of agricultural purposes only.

VI.

Agricultural Insurance

as a

Complement

of the

Agricultural Distress funds.

Agricultural Distress funds only benefit those who through undeserved misfortunes caused by the elements are standing on the brink of economic ruin. Further institutions are needed which shall prevent them being pushed to the brink of the abyss; organizations which at least *make good* in part undeserved injury in proportion to the injury without regard to the prosperity of the farmer; *agricultural insurance is needed.*

My investigation in the first part of this treatise lays stress upon the fundamental technical difference for insurance between the assessment of injuries to crops arising from acute or chronic causes. We will therefore distinguish here as well between:

- a. Insurance of crops against acute dangers;
- b. Insurance of crops against chronic dangers, or insurance against a *failure of the crops* in the more limited sense.

But since Agricultural insurance is not confined to the harvest alone, but also comprehends buildings,

cattle, stores, land, and soil producing the corn, &c, we have to consider :

- A. *Agricultural* insurance against acute dangers, and
 - B. Insurance against a failure of the crops in the more limited sense.
-

**A. Agricultural insurance against
acute dangers.**

Very important parts of this system have been already established in Europe: viz. *Fire, cattle and hail* insurance; also, as far as the German Empire is concerned, a public duty of indemnification is recognized with regard to the devastations of the one pest of the vine—the *phylloxera*. This duty is recognized, however, *not* from the insurance point of view, but from that of the checking the spread of the disease in question.

For the sake of brevity I will again confine my remarks to *Germany*.*

* Cf. H. Brämer. *Life and Fire Insurance in Prussia in the years 1883 and 1884*, as well as the *Results of the German Insurance offices in 1884*, with a retrospect on former years. *Zeitschr. d. k. Preuss. Stat. Bur.* 1886, 73-128.

In the year 1884 the **total amount of insurance**
amounted, in marks,

In the <i>public</i> fire insurance offices to	29,343,012,000
„ the larger <i>private mutual</i> fire insur. cos. to.....	6,184,233,000
„ <i>joint stock</i> fire insur. cos. to	about <u>39,250,000,000</u>
	total about 74,777,255,000

To be deducted for <i>municipal, com-</i> <i>mercial and non-German</i> insurance business, as well as for reinsured amounts reckoned twice,	say	<u>44,777,245,000</u>
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Thence remains*

Agricultural fire insurance

about **30,000,000,000.**

In the <i>mutual hail</i> insurance cos.	888,038 000
„ the <i>joint stock</i> hail insurance cos.	<u>897,041 000</u>

Hail insurance	total	1,785,079,000
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In 4,026 private Prussian insurance offices † (1883).	151,125,000
„ 16 larger <i>German</i> cattle insurance cos. (1884)	<u>58,496,000</u>

Cattle insurance	total	<u>209,621,000</u>
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Agricultural fire hail and cattle

insurance together	about	31,994,700,000.
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*) Of the total *injuries* caused in Prussia by fire (1888) only 27 per cent fell on the towns, and 73 per cent on the country; the *relative* loss by fire in the latter was, however, *much* more considerable: per 1000 head of the population it amounted in cities to 1641 $\frac{1}{2}$, in rural communities to 2344 $\frac{1}{2}$, and in rural districts to 4941 $\frac{3}{4}$ marks. (Corresp in d. Ztschr. d.k. Pr. Stat. B. 1887 XLVIII. The total *insured sum* from this might consequently have to be fixed lower for the country than for the town, and the above estimate of the agricultural fire insurance seems to be tolerably correct, rather too low than too high.

†) Brämer has 4,034 offices with an insurance sum of 174,122,000 marks. In order to avoid counting a thing twice, I have deducted 22,997,000 mark of insurance money for the 8 larger German cattle insurance Companies which were contained therein also.

Hence in Germany there are *about 32 milliards of marks worth of agricultural property* under the protection of insurance,— of which sum about 30 milliards are protected by agricultural *fire insurance*—a sum 5 or 6 times as great as the estimated market value of the whole landed property of Japan. What has Japan to set in comparison with this?

The reports for *Hail* and *Cattle* Insurance are, it is true, not so encouraging; nevertheless, they covered about 2 *milliard marks'* worth of agricultural property; Hail Insurance taking $1\frac{3}{4}$ milliards of marks, a sum which represents crops of about three times the value of a whole good rice crop in Japan; and Cattle Insurance embracing a total of more than 100,000 horses and half a million head of horned cattle.*

And yet how insufficient this still is! insufficient in two respects; there is (1) the insufficiency in the comprehension of insurable property, and (2) the insufficiency of the extent of protection affordable to the property insured.

Insufficiency in the comprehension of insurable property:

Hail insurance.—In *Prussia* this forms the rule with

*) Just a few more statistical notes on the extent of cattle insurance in Prussia: out of 3,124,046 Prussian households possessing live stock (I. 10. 1883) in the year 1883, 543,659 or 17.4 percent had effected insurance policies for 1,243,713 head of cattle. (See Stat. Jahrb. f. Preussen V. 214., and Brämer a. a. O. S. 120). *The owners of a few head of cattle, who, in Japan, have nearly the whole of the cattle in their possession, insure most.* The Prussian Minister for Agr., a. a. O. P. 250, says: "Cattle insurance is widely spread only among the smaller and medium cattle-owners in the western central provinces."

regard to the larger landed proprietors, but it is the exception among the *peasant population*.* In *Baden* the number of hail insurance policies effected among the whole total (200,000) of agricultural households amounts to only 1,200, i.e. to 0.6 percent.† The same in other parts of Germany.‡ *Bavaria* by the law of Febr. 13, 1884, has made the first progressive step. By this law the Bavarian Government has taken in hand the direction of a mutual hail insurance company.

Cattle insurance.—In *Prussia** in 1883**

out of 2,417,138 horses	only 99,884 or 4.1, p.c. were insured.
„ „ 15,785,322 horned cattle	„ 508,357 „ 3.2 „ „ „
„ „ 19,185,362 sheep	„ 6,431 „ 0.03 „ „ „
„ „ 9,205,791 pigs	„ 571,516 „ 6.2 „ „ „
„ „ 2,639,994 goats	„ 5,125 „ 0.2 „ „ „

More than 95 percent of their losses through the death of cattle the Prussian farmers suffer uncovered. To be sure,

*) Agr. Minister's Report, p. 247.—In the 3 years 1881—83, 30½ imllion marks have been paid by the societies for damages.—Total damage by hail unknown.

†) A. v. Miaskowski. Concerning agricultural enquiries. Schmollers Jahrbücher. IX. 934.

‡) For *Württemberg* see *R. Scharpff's* report on the enquiry there, in *Schmoller's Jahrb.* XI. 1315.—According to the Stat. Corresp. 1883. XV. the annual average loss (1828—1882) of property through hail in *Württemberg* was 2,389,000 marks.

In *Austria* agriculture suffered injury by hail in the 11 years 1872—82 to the amount of 117,000,000 florins, of which sum, according to official statistics only 6,400,000, or 5.47 per cent, was made good by the hail insurance companies. November number of the Stat. Monatschr. vol X., Vienna, 1884.

*) These number of heads are according to the census on Jan. 10., 1883, Stat. Jahrb. f. d. Deutsche Reich. 1885. p. 31; the insurance figures according to Brämer, p. 120.

**) Besides miscellaneously insured 52,400 head *various kinds* of live stock.

for the animals slaughtered by order of the police on account of suspected disease an indemnity is paid from the public funds (of the empire, of the State, or of the province). This does not, however, amount to much.*—In Würtemberg, too, “the insurance of cattle is very scanty.”†

Insufficiency of the extent of protection affordable to the property insured, as the table on p. 375 shows.

Hail, which can be insured against, we see, only injured *one seventh* part of the number of communities and rural districts injured by other *acute* causes against which insurance *cannot* be effected.

Is there now any economical or technical difference for insurance between a rye crop *beaten down by hail* or a rye crop *nipped by frost*? A difference so great that it is rational to offer and afford insurance against the one danger, and impossible to do so against the other? Or again, what difference for insurance‡ is there between

* In the 4 financial years 1878—82 the following sums were paid by the treasury, and by the provincial and communal unions, in accordance with §§. 57 and 60 of the Cattle Plague law of June 25., 1875, for 8840 horses killed because affected, or supposed to be affected, by glanders 1,657,262 marks, and for 8087 head of horned cattle killed because affected, or supposed to be affected, by lung disease 1,411,068 m. Thus averaging annually 767,000 m., in round numbers. Cf. Stat. Jahrb. f. Preuss. V. 219, 221, and 224.

† Cf. the quoted enquiry l.c., p. 1315.

‡) With regard to the injuries caused by insects the difference is a merely *administrative* one: *damage caused by insects requires* an activity of the agricultural police to prevent the recurrence, and the spread of injury to other districts, *hail does not* require this. But this difference would only plead for the inclusion of these ravages caused by insects under insurance. Public fire insurance offices formerly demanded the re-building of the edifice

a corn field beaten down by hail and a meadow eaten bare by an insect plague? In cases of such entirely undeserved easily recognisable misfortune, why should the principle of distributing the damage on many shoulders not be carried out just as well as in the case of damage caused by the beating down of the crops by hail?—The *economical systems of the nations of Europe are illogically and unsystematically arranged with regard to the sphere of crop insurance.*

The size and the *extent of insurance* of insurable property, which we designate as insufficient for Prussia will for many years to come be for Japan a goal which can be only with difficulty attained. In Germany, which in other spheres of insurance has taken the lead, with the example of compulsory insurance, formerly against fire, latterly against sickness and accidents, and which is on the point of applying the same rule with regard to insurance against old age and infirmity as well, in Germany, which in mutual fire and hail insurance offices, in Bavaria, connected with the State administration, and in the old county fire insurance unions already possesses proto-types of public organizations merely for the common weal, in Germany, where in hail insurance and land credit institutes a numerous staff of experienced agricultural appraisers is to

destroyed, and some times even in a manner safe against fire, and made the payment of the indemnification depend upon proof of this; in the same way here the payment of indemnification could be made to depend upon the proof of the performance of the protective measures ordered by the police. As in the case of the above mentioned *Noctua graminis*, for instance, such protective measures would be early mowing of the meadows, strewing of salt, the use of rollers and weighted bush harrows.

Of the 54,907 Communities and Rural districts of the Prussian State were injured :

By:	1878.	1879.	1880.	Together.	Yearly average:	
					in Numbers.	in Per cent.
Acute causes:						
a, already insurable: Hail	946	1,372	3,433	5,751	1,917	3.6 p/c
b, still uninsurable:						
Nos. 1,4,5 and 6. of the Table on page 354.	8,592	11,070	22,237	41,899	13,966	25.4 "
Chronic Causes:						
Nos. 2. 3. and 7. of the above table	1,871	7,644	10,115	19,630	6,543	11.9 "
Total:	11,409	20,086	35,785	67,280	22,426	40.9 p/c
Percentage of all communities &c.,	20.8 p/c	36.6 p/c	65.2 p/c	122.6 p/c	40.9 p/c	

be found, in Germany, we repeat, an universally *comprehensive* insurance might well be reached by compulsory insurance.

As *Thiel* very truly remarks,* only those forms of compulsory insurance are inadmissible which would tend to abolish each and every result of *deserved* misery, which would burden the better elements of society with the task of dragging along the worse with them on exactly the same level as their own mode of living, which would hinder the necessary cleansing of society from its worst elements. But whereas in agricultural insurance, only undeserved effects of natural calamities are to be divided in space and time amongst the whole number of the interested parties, then we have, I think, a sphere for justifiable legal compulsion. In the very general participation in fire insurance, even after the abolition of compulsion, in contrast with the dwarf development of hail and cattle insurance, in which compulsion was never resorted to, we possess, for Germany, a clear mathematical proof of the beneficial *educational* influence which is exercised by the social wisdom embodied in the legislature, when it imposes in the interest of all what has been recognised as right, upon each individual, careless or careful, wise or foolish, by means of legal enforcement. In Japan, which at present is still under the ban of the economic doctrines of an individualism adverse to any State interference, insurance could at first only be a voluntary institution,

*) H. Thiel. *Wirtschaftliche Selbstverantwortlichkeit und Versicherungszwang*. Schmollers Jahrb. XI. 494.

only perhaps promoted by making the effecting of insurance an obligatory condition for loans from the land credit Institutes. I would lay still more stress than I do above, on the *correctness of the principle* of compulsory insurance, if the *practical* difficulties here were not too greatly enhanced by the adoption of compulsion. The establishment of the system of insurance is in itself a very difficult task, but compulsory insurance would mean that at the very outset the whole rural population would at one and the same time have to be brought under insurance. In order *later on* to be able to reach the greatest possible extent of the insurance of insurable property, from the very beginning the *plan* ought at any rate to be directed not towards purely private institutions, but towards public mutual institutions controlled by the greater self-governing bodies and connected with them.

The insufficiency of the kinds of protection affordable by insurance up to the present is very obvious in Japan. Insurance of the crops *only* against hail would here be of little use, where it hails very seldom indeed, and where only at *very long* periods isolated hail storms of any magnitude occur, such as those of which Japanese History speaks of as remarkable events. (Cf above p. 295.) And the insurance of buildings against fire *alone* would leave unnoticed the equally undeserved, sudden and ruinous destruction caused by storms, earthquakes and floods. (Cf. above, pp. 293. 294).

Thus Japan in notoriously well known circumstances

has much reason to approach more nearly to the thought of *insurance, classified by objects, against collective dangers*, with regard to her buildings, and with regard to her crops; she can certainly not be contented with a mere imitation of the existing scanty fragments of agricultural insurance.

The fundamental idea of the insurance classified by objects against collective dangers is, that the insurance policy protects the insured property against *all possible* dangers without these being each separately named in the document, but on the contrary, that those dangers against which the property is *not* insured, or only partially so, or only under certain conditions, are to be individually mentioned. The great advantage of this would be not only the including within the circle of dangers some very considerable, frequently occurring, ones against which, though insurance is possible, it is yet not customary; but also that *eo ipso* insurance would be effected against individual dangers, which occur *but seldom*. For these kinds of dangers it would not only be troublesome and expensive but also entirely impracticable to establish special insurance institutes, since every one in his optimism imagines that he has nothing to fear from a danger of so rare occurrence. Under the principle of *special* insurance, merely because the misfortune is a rare one many people suffering from misfortune *must remain unaided by insurance*; under the principle of the object insurance against collective dangers it is *possible* to lighten the burden of every sufferer

from undeserved misfortune by distributing it on many shoulders.

With such an extension of affordable insurance protection Japan would set an example to other countries.

B. Insurance against crop failures, in the more limited sense.

Besides crop insurance against acute dangers I speak of insurance against the failure of the crops caused by chronically working elementary causes. Above I distinguished between 3 grades. In the lowest grade the injury is to be borne by the farmer himself alone, and in the middle and highest grade a remission of the landtax is to take place.

In this connection, we ought to discuss the relation of the *landtax aid* at present affordable by the Agricultural Distress fund to the *landtax remissions* in case of bad harvests of the middle and higher grades as now recommended.

The granting of the landtax aid by the present Agricultural Distress fund depends on the proof of the *distress* caused by elementary misfortune. It does not appear advisable to take from the present Agricultural Distress funds their character of Distress funds, and to impose on them the necessity of granting *remissions* of the landtax, without proof of any distress in cases of proven elementary misfortune of a certain character and of a certain extent. This might easily be beyond their

power. This kind of land tax remission must be carried out by a new extra grant from the Treasury, in addition to the customary endowment to the Agricultural Distress fund. This would be one of the most efficient forms of reducing the landtax, and would work in a more useful manner than simply a general direct diminution of the land tax.

But land tax remission *by itself* would not be sufficient in cases of the highest grade of bad harvests. Protection against this we understand to be included in the programme of the agricultural insurance in application of the principle of insurance against collective dangers, that is *without* the drawing of special policies of insurance against bad harvests. When bad harvests of the worst description occur, one portion of the loss would fall on the shoulders of the farmers, as is the case with the lowest grade, one portion would be covered by the remission of the landtax, and the *remainder* by mutual insurance.

The Finance Ministry requires a suitable means for the adjustment of landtax remissions in the specified cases of bad harvests. Agricultural mutual insurance managed and supervised by public self-governing bodies with the co-operation of the provincial prefects, would appear to be such. Without compulsory insurance, it will indeed include only a fraction of the farmers as its members, and consequently will only undertake to assess for them the bad harvests of the middle and highest grades. Therefore it would be a remission of

the landtax only for this part of the farmers of Japan. But since every farmer can become a member of the agricultural mutual association, he cannot therefore complain, if of his own free choice he has not become one, that perchance he does not share in the advantages accruing therefrom.

By the course of this consideration we have arrived at a kind of state contribution to agricultural insurance. The restitutions actually paid by the latter would be charged to the State, for every year in question, by the mutual insurance association. In case these sums exceed the estimate in the budget, the insurance offices would first advance them, and the State would repay them in annual instalments, in order so to prevent the occurrence of large contributions of *fluctuating* quantity which would disturb the national finances.—These restitutions of the landtax, however, would *not* assume the *form* of tax remission, but that of indemnity for injury, in the same manner that aids and loans for the payment do not assume that of remission or respite of the landtax.

Should agricultural insurance not include insurance against bad harvests in its programme, it would not require the State contribution. In that case the completeness of the system of aid granted to the farmers is naturally not so perfect.

If we wished here to carry still further the above comparison of Japan with Germany, we should now have at once to confess that Germany possesses *no* system of insurance against bad harvests. In that

case the consequence of the parallel would be that what has been recommended and proved to be good for Japan, might be equally well recommended for Germany or European states generally; and that, as in Japan means are to be provided from the *landtax* revenues for purposes of Agricultural distress, in the same way in Europe *traffic* revenues should provide the required funds; since it is this very traffic which causes in the economical system a derangement so unfavourable to agriculture. In European countries a certain *proportionate* part of the agricultural import duties would year by year, have to flow into the Crop Failure Reserve funds, failure in the more limited sense, as a standing endowment, and the amount of this source of income would suffice to meet the great claims for indemnification in years of bad harvests by accumulating during long periods these moneys and their interest, in addition to the insurance premiums.

In consequence of her less close participation in the world's traffic in grain, Japan does not yet require the last mentioned method. But now, in all economical conditions, Japan is making unceasing progress towards Europeanization. Trade, circulation of money, steamship navigation, railways are all rapidly developing. Within one or two decades Japan will be already exposed to the influences of world traffic and world commerce as completely as European states. The opening of the Panama canal will also exercise an influence. The difficulties which European states experience from

the influence of the development of traffic must then also affect the agriculture of Japan, but these difficulties could be lessened considerably, if, for the protection of her agriculture, she had associated agricultural insurance to her agricultural distress funds, besides at the same time developing in this connection her savings banks and credit organizations.



VII.

The property of the Agricultural Distress fund

as

a point d'appuie
for the New organization.

The Provincial Savings and Land Credit Institutes, and the Agricultural Insurance would benefit the same persons, the same class as the Agricultural Distress funds do, viz., the farmers. We need therefore have no scruples in making a further useful application of the financial means of the latter funds as a *point d'appuie* for the introduction of the first mentioned institutions. Not that the agricultural distress funds are to “*spend*” any of their means,—for by so doing the money would be distracted from the proper direct purposes of the *Distress Fund*—but that they are to “*advance*” to the new institutions the capital necessary for their first organization and their working, under the condition that interest should be paid on this loan, and that it should be paid back to the funds by instalments. This seems to be safe also, for the reason that both institutions are *institutions guaranteed by the provinces* conducted by the very same communal, self-governing bodies and that the agricultural insurance associations will be mutually cooperative organizations of *legally secured undoubted* solvency.

The existence of means *at hand* will make it easier for each provincial diet to come to a decision on the introduction of the recommended institutions for the common welfare. The necessary legal permission to thus *invest* a certain part of the agricultural distress funds property might be granted to them by an additional article to the agricultural distress law of June 15, 1880.



ADDENDUM. (1891).

Since this book was written the former law governing the System of the Agricultural Distress Funds in Japan has been greatly altered by Law No. 5, d. d. Febr. 7th, 1890.

The State promised by Art. 3. 4 and 11 of the former Law (d.d. 15. VI. 1880) an annual contribution of Yen 1,200,000 to the Agricultural Distress Funds, *for a period of 20 years*. The Law of 1890 revokes this.

The State ordered by Art. 2. and 4 of the former Law that the payers of Land tax should contribute at least 900,000 yen p.a. to all the Provincial Agricultural Distress Funds together. The law of 1890 abolishes any contribution of the Land tax payers.

On the other hand the rice business, hitherto a source of loss to the Provincial funds, is given up.

The *income* of both kinds of funds, the Central and the Provincial is now limited to the interest derived from their accumulated capital.—On the 31. of March 1889

the Central A.D. Fund amounted to Yen 3,823,156

„ Provincial A.D. Funds „ „ „ 14,380,639

Total: „ 18,203,795

in addition to loans, not yet repaid, of

the Provincial Funds to distressed people „ 375,087

By the further accumulations up to the time of the law No 5 the property of the funds may have increased

to about 20,000,000 yen and their income from interest to about 1,200,000 yen.

Whereas formerly each Provincial Administration had full power to disburse, if distress required it, *two thirds* of the Provincial Distress Fund at its own discretion, it has now only power to disburse thus 5% of the Provincial Fund during the time of one year.

Of course this will be quite insufficient in any case of a great emergency. Then the Central Fund shall contribute to the needy Provincial Fund after deliberation and decision of the Ministers of Finances and of the Interior. These latter contributions may surpass the accruing interest.

The purpose and the duties of the Funds (Art. 1 and 6 of the former law) have not been changed.

In ordinary years the Funds will work in the same way as before, only their dependance on the good will and the discernment of the Ministers has been increased. But in consequence of this cutting away of 2,100,000 yen of their yearly income the Funds will be much weaker and less useful than they ought to be in future extraordinary calamities, such as the great earthquake of the 28. of last October in the provinces of Aichi and Gifu, with its awful destruction and following undescrivable misery. Especially is the *delay* to be deplored which is now unavoidably caused by the necessity to submit first (substantiated and detailed?) reports and descriptions to the deciding Ministers in order to procure ampler means, whereas formerly the means of the Funds

to be employed *immediately*, were in themselves ample. If the Ministers grant from the Central Fund *more* than the amount of its annual interest they exhaust the Fund, which has lost its regular source of supply, *if less* the grant will in many cases be insufficient. If great calamities never happened, the reduction of the income of the Central and of the Provincial Distress Funds might be approved, as wise. But they do happen.

It is to deplored that the great work of the one Minister of Finances, Count OKUMA, has been partially spoiled by his successor, Count MATSUKATA.

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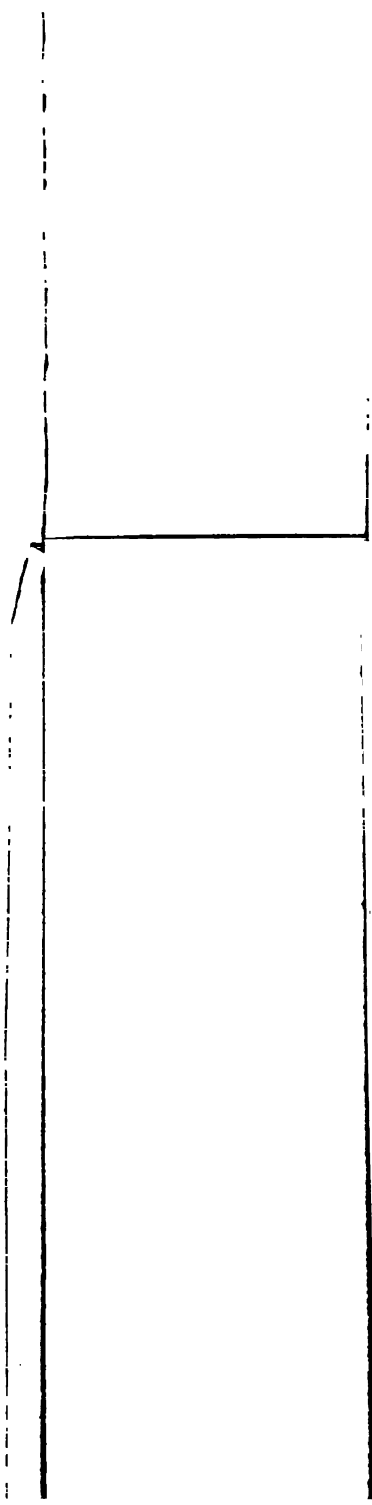
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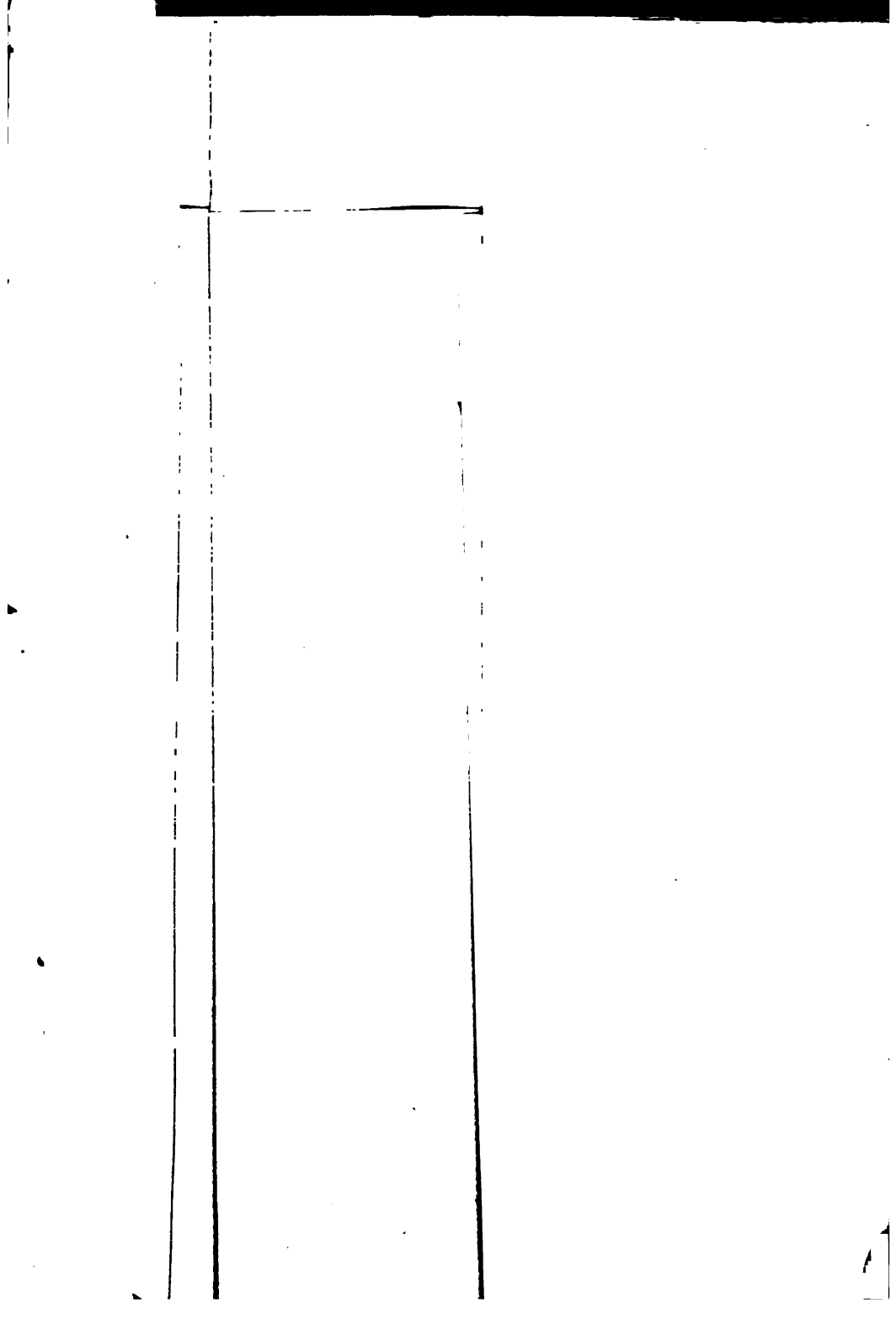


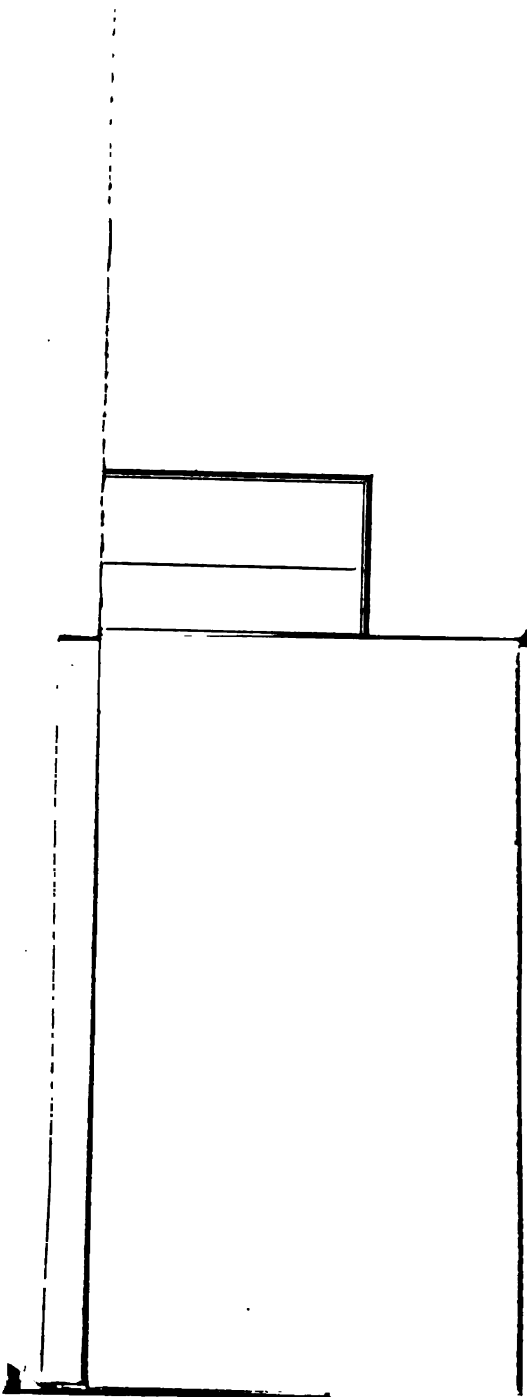
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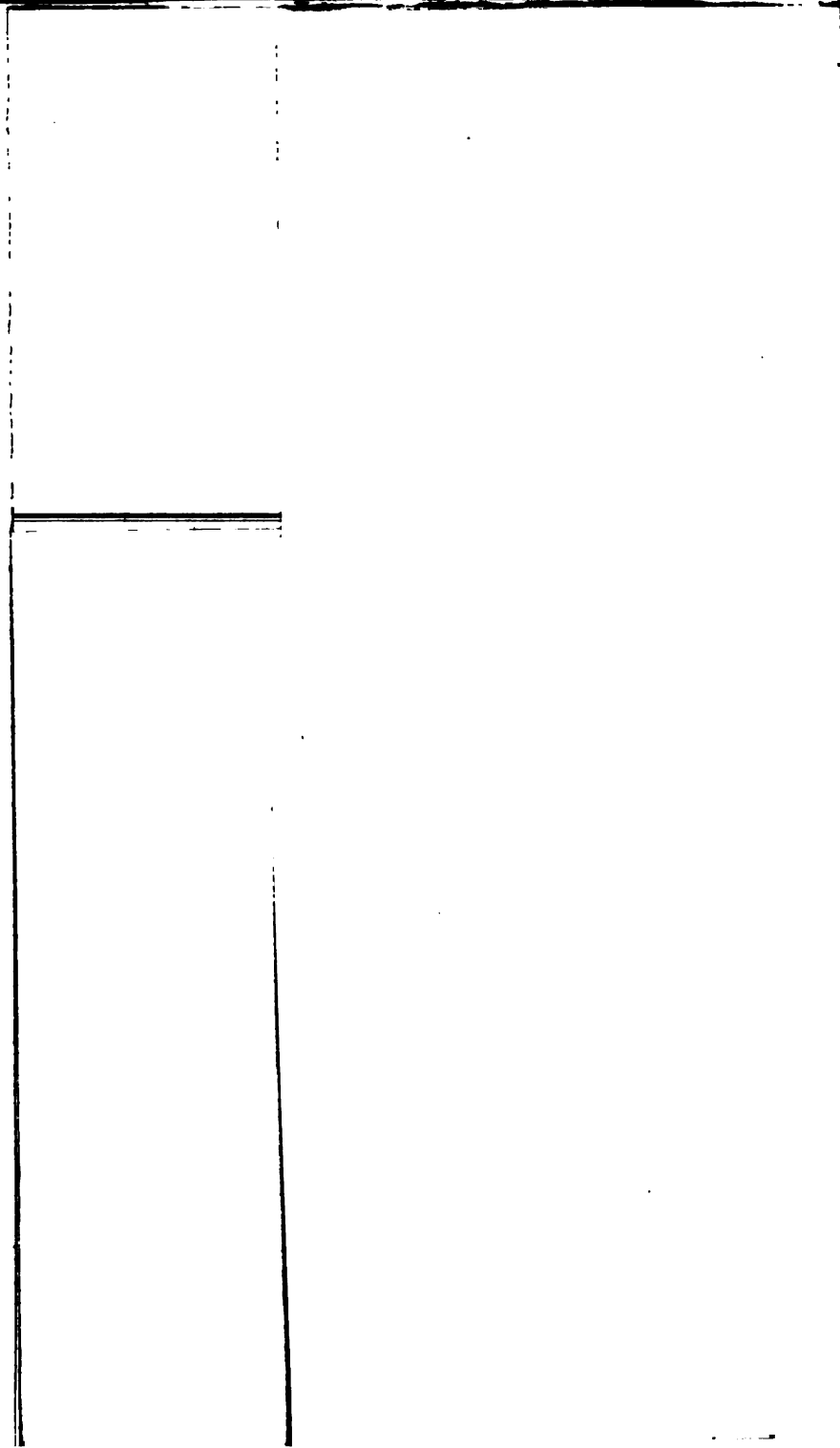


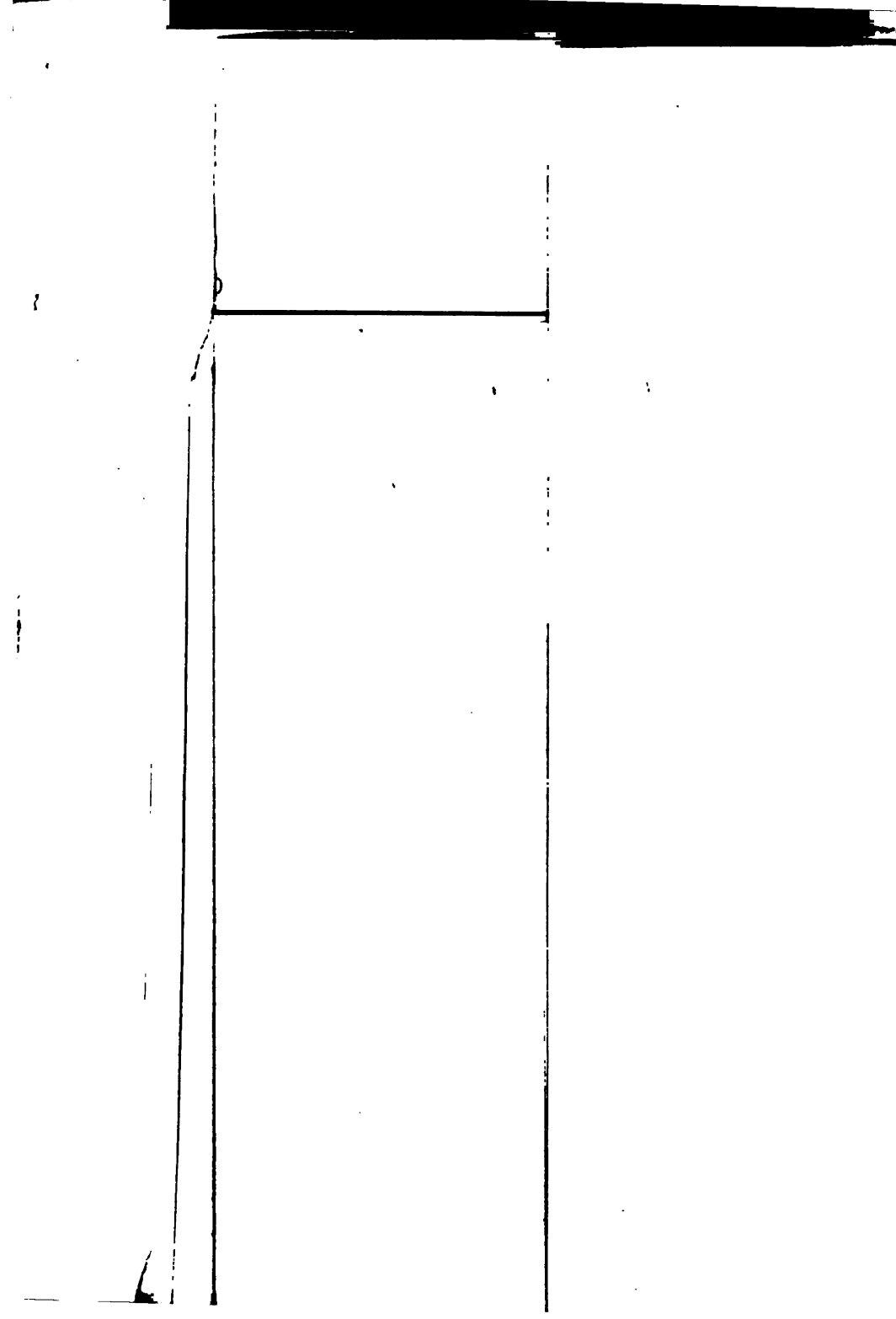












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CONTENTS.

	Page
Agricultural Insurance, In organic connection with Savings Banks, Land credit, and Redemption of debts. ...1—136	
Introduction: Letter addressed to H.E. Count Yamagata Aritomo, Minister of the Interior.	
1. — Unsatisfactory condition of the Japanese rural population ..	3
2. — Reasons: the fixed and high money land tax; and want of suitable credit and insurance	„
3. — Covering by insurance not the correct remedy for all losses. Saving.—Absence of appropriate institutions for saving	4
4. — Two things necessary: I. relief of peasants already suffering from usurers; II. precautions against recurrence of such distress	5
5. — Interest Limitation Law of Sept. 11th, 1877	6
6. — Proposal: Dissolution of the relations between creditor and debtor by commutation of mortgages. Short withdrawable credit paying high interest to be replaced by unwithdrawable credit at a low rate of interest. Relief of the Japanese peasant class by 13 to 14 million yen annually	„
7. — Reduction of the limits of interest	7
8. — Arbitration bonds for the commutation. Strengthening of the peasant proprietors' power by agricultural insurance (crop, live stock, building insurance) and convenient opportunities for saving. (Parochial post office savings banks, rural savings unions, Provincial savings and land credit banks	„
9. — Difficulties of simultaneous establishment. Immediate effecting of relief by commutation desirable	8
10. — Part of proposals new, part copied from prototype	9

- §. 11. — Task of Ministry of the Interior, corresponding tasks of the Prussian Ministry of the Interior. Partial co-operation of the Ministry of Justice 10
- §. 12. — Further developments: For the improvement of the condition of rural tenants, for promoting agricultural cultivation; promotion of the colonization of Hokkaido, and reorganization of provincial finances 12

PART 1: SYSTEMATIC INVESTIGATION.

- §. 13. — Introduction 15

Division A: Property and Crops and their Endangerment.

First Chapter: The property of the agriculturist and its endangerment.

- §. 14. — Possessions: Land and soil, buildings, live-stock, harvests, stores and seed corn, agricultural implements; Dangers: inundations, fire, earthquakes, cattle-plagues, war, &c 18

Second Chapter: The farmer's crops and their endangerment.

- §. 15. — Preliminary remarks. Dependence of crops both in quality and quantity 1. on Men: (a) on the farmer himself, (b.) on others, 2. on Nature.. .. . 20
- §. 16. — To 1. a. Multiplicity of the farmer's labours. Supervision impossible "
- §. 17. — To 1. b. Injurious influence of others: Wrong instruction, incorrect crop insurance, neglect of river regulation, dikes, protective forests, war, rebellion 21
- §. 18. — To 2. Influences of nature: a, chronic, b. acute 22
- §. 19. — To 2. a. Chronic calamities. Occasional complete failure of the harvest throughout the whole land. "Bad" harvests. The less pronounced be the unfavourable general climatic character of the year, the more able is the farmer to guard against ill results by timely preventive labour. Series of bad years, groupes of years of medium harvests, and groups of good years. In "bad" years generally a better crop of some kinds of produce "

- §. 20.— To 2. b. Acute natural calamities. Helplessness of the individual; co-liability of human society in which the individual lives. (Inundations, insect plagues, diseases of plants) .. 25

Division B: Nature of Insurance.

- §. 21.— Introduction. Concerning the different kinds of insurance institutes.
 Order of discussion:
 First Chapter: Distribution of the loss among many by annual allotment only.
 Second Chapter: Distribution of the loss among many and over a space of time.
 Third Chapter: Exclusion from insurance, either total or partial.. .. 26

First Chapter: Distribution of the loss among many by annual allotment only.

- §. 22.— Annual allotment the most simple means of mutual insurance; the more perfect, the greater the number of members insured, and the more they are spread over a larger area.—
 First requisite for an agricultural insurance in Japan: Provincial mutual insurance associations with a re-insurance association for the whole land 30
 §. 23.— The sole means of annual allotment usually but not always sufficient 32

Second Chapter: Distribution of the loss among many and over a space of time.

- §. 24.— Distribution of the loss among many and over a space of time by means of annual allotments, reserve funds, and loans, a means of mutual insurance.. .. 34
 §. 25.— Two conditions for the employment of loans: Limitation of retirement of members, and limitation of competition 36
 §. 26.— Increase of capability by this means.—Insurance against devastations by war and insurrections, insect-plagues, and diseases of plants 37
 §. 27.— Reason for including under insurance a very great number of plants under cultivation 39
 §. 28.— Reason for including under insurance all plants under cultivation. 40

Third Chapter: Exclusion from insurance either total or partial.

First sub-division; Partial indemnities a precaution against wilful injuries.

- §. 29.— A fundamental principle of insurance, that it does not protect the insured against results of his own culpable carelessness or illwill.—Influence of the uncontrollable nature of agricultural labour upon the question of insurance against injuries influenced by chronic climatic causes. Distinction to be drawn between years of complete failure of crops and years of bad harvests simply 41
- §. 30.— Under-insurance and partial indemnities for protection against ill-will and carelessness 45
- §. 31.— Different kinds of arrangements of under-insurance and partial indemnities. In fixing the partial compensation for buildings, cattle and crop insurance a distinction to be made between classes of dangers 46
- §. 32.— No difficulty caused to the administration by the establishing of partial compensation 49

Second sub-division: Only apparent losses a peculiarity of too widely extended crop insurance, or the influence of market prices on the question of insurance.

- §. 33.— Preliminary remarks 50
- §. 34.— Years of bad harvests not always bad years for the farmer. Rejection of *quantitative* crop insurance and crop insurance based on *money* value 51
- §. 35.— Inquiry into an insurance of the money value of the harvest. Eventual requirements of the same: (a) reliable statistics on market prices; (b) correct determination of the markets for the different kinds of produce of each insured farm in different seasons; (c) determination of the average harvest; (d) determination of the selling capacities of each farm
(aa) Constantly repeated determination of all actual harvests.
(bb) Assessment of home consumption inclusive of seed grain.

Further reasons against insurance of the *money* value of harvests. Disturbance of agriculture by loss of time, considerable

expenses of administration, impossibility of fixing the indemnification before the lapse of one year.—Result: Insurance of *money* value of harvest likewise *not* advisable 52

Third sub-division: Restrictions with which the insurance against “bad harvests” may be included in crop insurance, or the influence of market prices, home consumption, and taxation on the condition of the farmer in years of great failure.

- §. 36.— Distinction to be drawn between 3 grades of failure.. .. 57
- §. 37.— For the lowest grade,—no insurance advisable „
- §. 38.— For the medium grade,—claims on the Agricultural Distress funds, and remission of land tax most advisable 58
- §. 39.— For the highest grade,—support of the farmer also by insurance. Possibility of insurance against crop failure if indemnification is restricted to:
 - a. cases when the failure is clearly owing to natural causes;
 - b. cases when the harvests are below the average by.... per cent;
 - c. partial compensation;
 - d. indemnification at previously stipulated fixed prices only 60

Division C: Relations of natural calamities and agricultural insurance to the debts of the farmer and the circulation of money.

First Chapter: Concerning the farmers debts.

- §. 40.— In case of insurance being wanting, a six-fold relationship of debts to disasters and distress:
 - 1. all debts at a higher rate of interest;
 - 2. „ „ withdrawable at short notice;
 - 3. neighbour credit instead of bank credit, no repayment by small instalments;
 - 4. origin of debts in bad years;
 - 5. debts for combatting the influences of climatically unfavourable years;
 - 6. danger of usury in bad years.. .. 62

- §. 41. — Prediction of the threatening danger of usury, made 1878. Increase of mortgaging. Increasing distress of rural population. Examples. Height of the rate of mortgage interest 63

Second Chapter: The farmer and the circulation of money.

- §. 42. — Injury to the farmer by the present circulation of money, flow of money from the provinces to the capital (landtax, investment of half the Agricultural Distress funds, and the whole of the P. O. savings bank deposits in government bonds, or in the state treasury). Postulate that the considerable *funds* belonging to agricultural insurance by its connection with suitable *provincial* money institutes be retained in the province for the benefit of agriculture.. . . . 69

Division D: The filling up the gaps left in the protection afforded by insurance.

- §. 43. — Completion by *saving*. Alternation of good, medium, and bad years. On an average 3 years when the farmer may save to every one year when he withdraws his savings. Special value of saving to the farmer. Demand for saving opportunities such as
1. are handy for the farmer ;
 2. make him save regularly ;
 3. for the most part bring the farmers deposits back to agriculture in the form of mortgage loans for long periods, repayable by instalments, and at a low rate of interest .. 71
- §. 44. — The completion by means of the at present existing Agricultural Distress funds 73

SECOND PART: PRACTICAL REMEDIES PROPOSED.

Division A: The organic connection of Savings-Banks, Land Credit Institutes and Insurance.

- §. 45. — The peasant needs 1. the Savings-bank ; 2. the Insurance ; 3. the Land Credit.—The Land-Credit Institution utilizes the peasant's savings, and needs agricultural insurance ; both the peasants savings and agricultural insurance need provincial money institutions for the accumulation and investment of

- large funds in the province. Common use of agricultural appraisers by the Land Credit Institute and the Agricultural Insurance. Organic, mutually supporting, and benefitting connection of peasants Savings institutions, Land credit and agricultural Insurance 75
- §. 46.— Impermissibility of any risk from insurance for the savings banks or the land credit institute. Conclusion and postulate: An agricultural insurance office for the whole empire, and a savings and land credit institute for every province, this latter as a general agency, commissioned to transact the business of the insurance institute in its province 76
- §. 47.— Compulsory insurance for the mortgage debtors of the provincial savings and land credit institute, for the rest voluntary insurance 77
- §. 48.— Inducements for the Provinces voluntarily to establish, manage, supervise, and guarantee Provincial savings and land credit institutes, as soon as their foundation has been facilitated by the preliminary action of government.
- General reasons :—
1. the public welfare;
 2. the extension of self-administration.
- Eventual special reasons :—
3. the maintainance of a favourable provincial circulation of money ;
 4. the receipt of provincial loans 78

Division B : Agricultural Insurance.

- §. 49.— Objects of agricultural insurance: 1. fruit-bearing land and agricultural implements; 2. fruits (raw produce); 3. live-stock; 4. buildings. Two groups of objects to be excluded: 1. the later manufactures out of agricultural raw produce; and 2. other moveable property belonging to the farmer 80
- §. 50.— Insurable objects as a principle for classification. Disadvantages arising from absence of principle of classification. Disadvantages from classification according to kind of danger. Object-insurance against collective danger. The whole:— "Agricultural Insurance;" the parts: crop insurance, cattle insurance, building insurance 82
- §. 51.— Standard for the allotment 84
- §. 52.— Distribution of the loss over different associated parts, of the system: viz., the general association, the provincial associations, (County associations?, parochial associations?) 85

- §. 53. — Appendix: Justice of certain restitutions by the Province or the State 87

Division C: Facilities for Saving.

A: Provincial Savings and Land Credit Banks.

- §. 54. — The German savings banks, the greatest land credit institutions; land-credit at a low rate of interest and in small loans; in Saxony average of savings-bank mortgages 750 silver yen; average of the mortgages of pure land-credit institutes, however, 4,925 silver yen. Repayment by small instalments, surplus payments remaining at the disposal of the debtor. Review of the different amounts of the mortgages granted by the "First Austrian Savings-bank." Mortgage-Debenture Institute of the latter 90
- §. 55. — The Mortgage-Debentures. Advantages for a Savings bank from its connection with a Mortgage Debenture Institute.. .. 96
- §. 56. — In Japan only temporarily for the unit of the Province one "Provincial Savings and Land-credit Institute" Various kinds of communal savings banks in Prussia. Position of the Prussian provincial governors ("Oberpraesident") with regard to communal savings banks. Eventual transfer of further duties and authorisations to the governor of the province 97
- §. 57. — One Central Mortgage Debenture Institute to connect the different Mortgage-Debenture Institutes 100
- §. 58. — Two principal sides for the activity of each savings bank: 1., attraction and 2.) investment of funds. The Savings of the farmer 1. for strengthening his working capital, and 2. as a capital reserve for bad years. Attraction of funds in two corresponding ways by "Parochial Postal Savings-Banks" and by "Rural Savings Unions" "

B: Postal Parochial Savings-banks.

- §. 59. — Parochial Postal Savings Banks similar to the Postal School-Savings-banks proposed by me in a special treatise. Parochial Postal savings-banks possible in every parish 102
- §. 60. — Provincial savings and land credit Institutes where they exist, connected with the Parochial Postal Savings Banks of their districts, with a view to decentralization, for the credit in the provinces, and for securing the provincial circulation of money. 103

- §. 61. — Organization of Parochial Postal Savings-Banks by the General Post Office 104

C: Rural Savings Unions.

- §. 62. — Aim of the Rural Savings Unions to assist the farmer in saving a capital reserve for years when the cash produce of farms is low. Examples of savings unions for certain purposes 105
- §. 63. — "Stopped savings Accounts." Manner of proving that the cash produce of any particular year is unfavorable 106
- §. 64. — Saving with more favourable terms of interest for regular deposits, with less favourable ones in case of non-payment of the regular amount stipulated. Thereby teaching the members of a savings Union to practise regular economy.. .. 107

Division D: The Deliverance of the farmer from the hands of the usurer.

- §. 65. — *Introduction*: Historical examples of legislative liberation of the debtor from the usurer's hands.. .. 108

First Chapter: Interest Limitation Law of Sept. 11. 1877.

- §. 66. — The Japanese Interest Limitation law of Sept. 11. 1877. 110
- §. 67. — Inefficacy of the same. Instances: Firstly: Rate of interest on small mortgages on buildings in Tokyo 111
- §. 68. — Secondly: Rate of interest for loans of from 5,000 to 10,000 yen in Tokyo and Fukuoka 112
- §. 69. — Thirdly: Rate of interest for loans of from 5,000 to 10,000 yen in 8 principal commercial centres.—The proportion of cases of interest of 12 percent and under, to cases of over 12 percent on the pledging of articles was as follows:
- | | | |
|--|---------------|-----------|
| Gold, silver, government bonds, and silk | as 100 to 101 | |
| Goods, rice, grain and for mercantile personal credit. | as 100 to 213 | |
| Land and buildings | as 100 to 380 | 113 |
- §. 70. — Land and buildings at the greatest disadvantage for credit-purposes in Japan, because of the absence of suitable credit institutions; inveterate practice of usury on the farmer far beyond the legal rates of interest 115
- §. 71. — Requirements: 1. The reduction of debt usuriously increased by interest above the legal limitation must be made easy to the farmer;

2. at the same time as his debt is reduced he is to be completely freed from the hands of the usurer 115

Second Chapter: The commutation of peasant mortgage-debts.

- §. 72. — Improvement of the condition of the peasant class, a principal part of the Stein and Hardenberg legislation in Prussia. For the abolition of personal dependency arising from former thralldom and bondage, in Prussia, commutation of the respective burdens on the land. In Japan the question concerns the abolition of the debts of the peasant class arising from the recently introduced monetary system; this indebtedness has become still more oppressive through the increase of the purchasing power of the paper money. I recommend commutation of peasants mortgage debts 117
- §. 73. — Means of commutation in Prussia: Annuity banks and annuity letters, and a special administrative apparatus 118
- §. 74. — Administrative apparatus for commutation in Prussia:—
 1. District Arbitration Boards,
 2. General Commissions for whole provinces,
 3. A supreme agricultural Court,
 4. In every province one Annuity Bank.
 Eventual administrative apparatus in Japan:—
 1. County Arbitration Board,
 2. General Commission for each province,
 3. Extended General Commissions as courts of appeal, one for each province,
 4. Management of annuity letter business through the Provincial Savings and Land Credit Institute in each province 119
- §. 75. — Mortgage debentures ("1st class") guaranteed by the institute, mortgage debentures, 2nd and 3rd class, without its guarantee. 122
- §. 76. — Constitution and establishment of these boards 123
- §. 77. — Distribution and defraying of expenses. Commutations free from fees, stamp-duties and carriage. Requisites of legislation for the organization and procedure of Arbitration Boards.. . . 125
- §. 78. — Advantages of commutation of debts and disemburdening of the peasant class:—Procuration of ample capital for the support of agriculture without any considerable burdening of the state or provincial treasury. A hitherto ignored law enforced, and thus the dignity of legislature vindicated. Advantages to the debtor:—A rate of interest of about 6 percent instead of one of 15 percent. Proof of correctness of this estimate. Change of

credit at call and exposed to the danger of usury, into credit for a long period, and unwithdrawable, repayable in small, convenient, instalments without danger of usury	125
§. 79. — Commutation of debts without injustice to the creditor	128
§. 80. — Distribution of possible losses arising from bankruptcy of debtors in the case of mortgage debentures of 2nd and 3rd class among both parties, debtors and creditors	130

THIRD PART: HINTS FOR PRACTICAL EXECUTION.

§. 81. — Summary of Institutions	132
§. 82. — Plan of Gradual establishment	133
§. 83. — Time required	136

APPENDIX.

I. Developments 139—185

Chapter I.: Unavoidable compulsory sales of over-embarrassed peasant estates and the colonization of Hokkaido.

§. 1. — Unavoidable compulsory sales	141
§. 2. — Peasant population a necessity for Hokkaido. Regulated immigration organized by the state. My former proposals: Conscription of settlers, colonist associations, colonization banks, colonization Debentures	142
§. 3. — Settlement of farmers ruined by usury and declared bankrupt, in Hokkaido. The Provincial Savings and land credit Institutes become in the Hokkaido Colonization banks	144
§. 4. — Gain of domains for the state, crown lands for the Imperial House, large estates for the high nobility and for capitalists	145
§. 5. — Cheapening of colonization credit by the institution of agricultural insurance	147

Chapter II.: The commutation of a part of the lease rents
with the co-operation of the Arbitration boards and
of the Provincial Savings and Land Credit Institute.

- §. 6. — Peasant debts through leases. The lessor generally economically stronger. Striving of the tenant to become a land-owner. 148
- §. 7. — Deterioration of the condition of the tenant during the Meiji period. Injury to Japan's commonwealth 151
- §. 8. — The Land credit institute as a mediator in the sale of land to the former tenant 152
- §. 9. — Improvement to the tenant's position by the institution of agricultural insurance, conveniently situated savings banks, and the assistance towards their emigration to Hokkaido by the colonization bank 153
- §. 10. — Slowness of the working of these means. Difficulties of lease legislation 154
- §. 11. — Proposal of the co-operation of the Arbitration boards, the Provincial savings and Land Credit banks, for settling the difficulties between lessor and tenant :
 - 1. On the request of both, tenant and lessor, or
 - 2. On the request of the tenant alone,
 - a. when the tenant has previously been proprietor, and the present lessor is his creditor ; or
 - b. when, contrary to local custom the lessor afforded the tenant no relief in case of misfortune, or in bad years. 156
- §. 12. — Reference to German conditions 157

Chapter III.: The Land Cultivation Annuity Banks.

- §. 13. — Improvement and development of agriculture by facilitated credit for long periods, expressly for agricultural improvement undertakings. First the work of commutations, then the foundation of Land Cultivation Annuity Banks. Reference to German conditions 166
- §. 14. — The existence of agricultural engineers a preliminary condition for a Land Cultivation Annuity Bank 168
- §. 15. — Co-operation of the Arbitration Boards with the Provincial Savings and Land Credit Institutes when agricultural improvement credit is granted 170
- §. 16. — Absence of Japanese statistics on agricultural improvement undertakings. Bavarian, Baden and Saxon Statistics thereon. Main point :—Support of small enterprises. Introduction of the

- land credit with mortgage debentures, coming first according to time and importance 171
- §. 17.— Technicalities of the Land Cultivation Annuity Bank the same as those of a land credit bank with mortgage debentures 175
- §. 18.— Difference between the debentures of the agricultural improvement and simple land credit 176
- §. 19.— Management of business of Land Cultivation Annuity banks by the Provincial Savings and Land Credit Institutes 177

Chapter IV.: Provincial Savings and Land Credit Institutes and Communal Bonds.

- §. 20.— Organization of the system of provincial loans, for the improvement of the provincial circulation of money, and to avoid overburdening the farmer by local taxation. Means:—Communal Bonds 178
- §. 21.— Issue of communal Bonds by the Land Credit Institute. Possibility of their issue by the Bank of Japan. Advantages for the provinces of a competitive issue by the Provincial Savings and Land Credit Institutes 179
- §. 22.— Amount of expenditure for public works in Japan from 1876—82 181

II. The Land Credit Institute and its assistance in the organized Colonization of Hokkaido. 187—215

- §. 1.— Two spheres for colonization :—The colonization of the interior progressing rapidly, that of Hokkaido slowly 189
- §. 2.— Protection of Hokkaido by colonization a political task 191
- §. 3.— Organized colonization with co-operation of the Land Credit Bank (Colonization Bank) that the State may not have to disburse anything at all for the colonization of Hokkaido.. .. 192
- §. 4.— Task:—For 20 years annually 200 square Ri to be settled with 90 men per square Ri.. .. . 194
- §. 5.— Comparison with the German military burdens 198
- §. 6.— Comparison with the Japanese increase of population „
- §. 7.— Comparison with the period of Taiho 199
- §. 8.— The roll played by lease tenure in the colonization of North America 200
- §. 9.— Organization of the business of advances and return payments. Joint and separate responsibility of the inhabitants of a village.

The "Son-kuwai's" right of supervision. Hints for the constitution of the settlements	201
§. 10. — Fundamental features of the constitution of the "Shooku;" joint responsibility of a union of 10 settlements	203
§. 11. — Fundamental features of the constitution of a "Daiku"	204
§. 12. — Fundamental features of the constitution of a colonization-province. Joint responsibility of all the Shooku of one province; Joint responsibility of all the provinces of Hokkaido	205
§. 13. — The colonization debentures	206
§. 14. — Cost of colonization	"
§. 15. — For obtaining a lower rate of interest, sale of colonization debentures in foreign countries	207
§. 16. — For colonists tax in kind only	209
§. 17. — Cost of transport of taxes in kind to be defrayed by the provincial treasury	210
§. 18. — Hints as to further requirements of organization	"
§. 19. — Colonization debentures a safe investment	212
§. 20. — Peasants as settlers	213
§. 21. — Recruiting and conscription of the colonists	214
§. 22. — Permanent settlement of the fisher population	215

III. The Reduction of the Landtax. 217—253

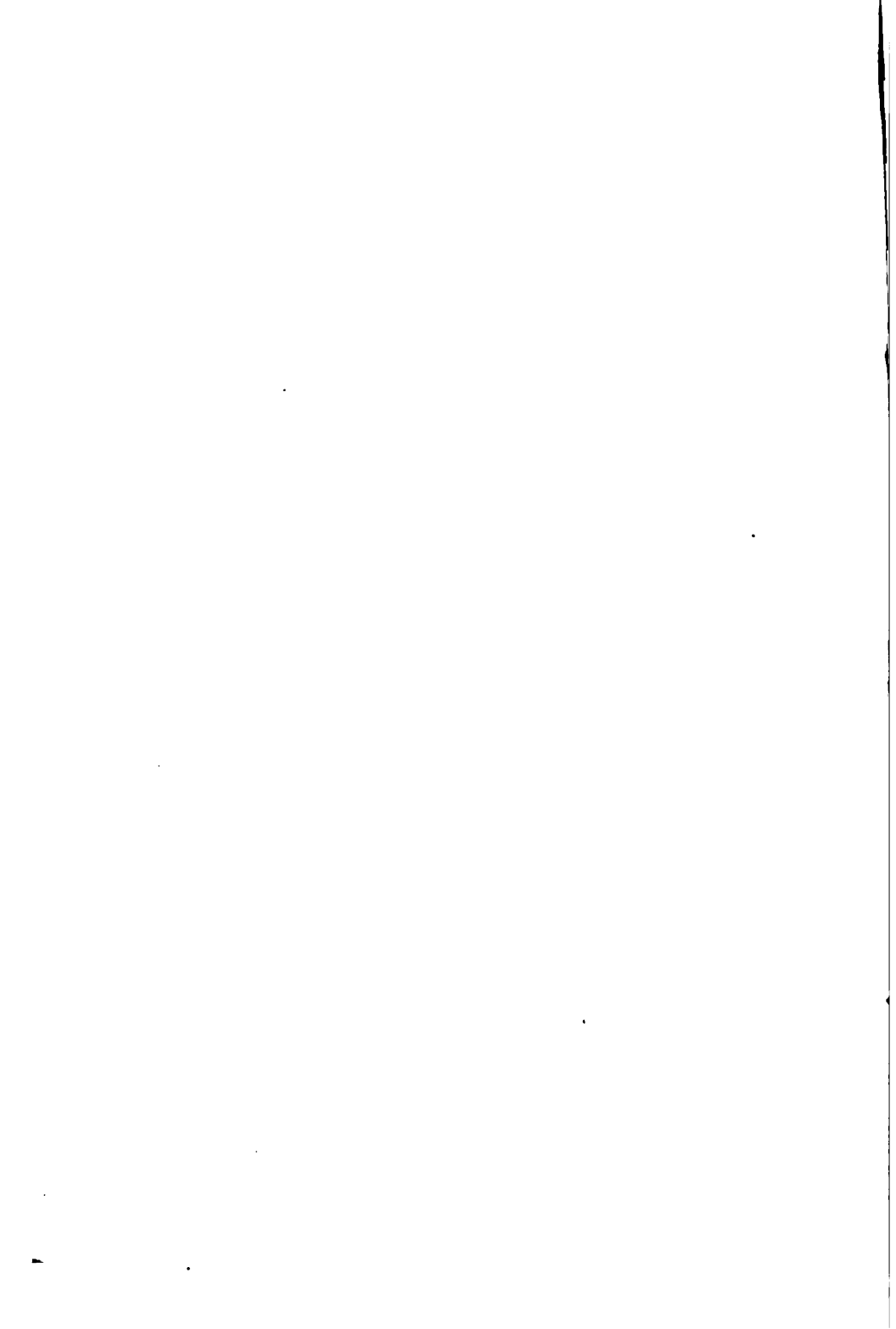
§. 1. — The Money-Landtax	219
§. 2. — Landtax in kind and money	228
§. 3. — Ways of utilizing the portion of the landtax paid in kind	237
§. 4. — The excessive landtax the most essential hindrance to the economical progress of Japan	242
§. 5. — Equalization by means of taxes on non-agricultural income	246

IV. The System of the Agricultural Distress funds in Japan. 255—385

I. Concerning the history of Agricultural Distress funds	257
II. Present organization of Agricultural Distress funds	276
III. Report on the working of the Agricultural Distress funds from Jan 1. 1881 to March 31. 1886.. .. .	282
Working of the Agricultural Distress funds	287
Income and expenditure of the Agricultural Distress funds	297
The administration of its property	305

IV. Results	343
V. The Treatment of Agricultural Distress in other States.. ..	349
VI. Agricultural insurance as a complement of the Agricultural Distress funds	368
A. Agricultural insurance against acute dangers	369
B. Insurance against crop failures, in the more limited sense	379
VII. The property of the Agricultural Distress fund as a point d'appuie for the new organization	384





Tables.

Tables in the text.

1.—Mortgages, compulsory sales, and failures in Okayama ken in 1879-83.	64
2.—Mortgaging of landed property in all Japan in 1881	65
3.—Investment of German savings bank funds in mortgages, 1881-82.	90
4.—Mortgage-claims of the 5 great Land Credit Institutes in Saxony 1882	91
5.—Percentage proportion of mortgage claims in 6 Saxon Savings Banks, according to their amounts	92
6.—Number and amount of mortgage loans of the "First Austrian Savings bank," 1872, arranged according to their amount.. . .	95
7.—Number of Prussian communal savings banks in 1882.. . . .	98
8.—Average rate of interest for loans of between 5,000 and 10,000 yen in Tokyo and Fukuoka, 1879-81	113
9.—Average rate of interest for loans of between 5,000 and 10,000 yen in 8 Jap. commercial centres, 1879-81	114
10.—Chronological table of the years when German Annuity Banks were founded	161
11.—Commutation of the real burdens on land, in Prussia, 1872-82..	165
12.—Bavarian agricultural improvement undertakings, 1853-1870. . .	172
13.—Saxon agricultural improvement undertakings, 1862-1879 . . .	173
14.—Expenditure for public works in all Japan, 1876-82.. . . .	183
15.—Source of funds spent on public works in all Japan in 1882 . .	184
16.—Immigration and emigration in Hokkaido, 1868-76.. . . .	190
17.—Increase of population in Hokkaido, 1876-80	190
18.—Size of the northern islands of Japan.. . . .	194
19.—Density of Population of different European countries, per sq. Ri.	195
20.—Area of Japan without Hokkaido or the Kurile Islands.. . .	197
21.—Length of terms for payment of land tax in Japan, 1876-85 . .	221
22.—Interest on capital invested in agriculture in Japan, in years of average crops, according to the Japanese landtax assessment . .	223
23.—Cost of cultivation of rice lands according to the Japanese land-tax assessment	224
24.—Landtax in various countries in percentages of the gross or net produce of the crops	230
25.—Indian and Japanese landtax	232

26.—Landtax of different countries in percentage: 1. of direct taxation and 2. of direct and indirect taxation together	250
27.—Direct and indirect taxation Japan 1878-79, 82-83, 87-88	252
28.—Rice granaries in China, in 749.. .. .	264
29.—Summary of the reports of the Imperial Japanese Ministers of the Interior and of Finance, with regard to Agricultural Distress funds	283
30.—Highest number of families relieved by the Agr. Distress funds in any of the different modes of relief	289
31.—Average amounts of relief in kind granted by the agricultural Distress funds.. .. .	292
32.—Average price paid by the A. D. funds on the purchase of gov. securities and rice.. .. .	300
33.—Profit on gov. securities and on rice realised by the prov. A. D. funds	301
34.—Loss for the prov. A. D. fs. on gov. securities and on rice	302
35.—Table of percentages of the modes of investing the property of the prov. A. D. funds	306
36.—Table of percentages of the modes of investing the property of the central A. D. fund	310
37.—Calculation of the net selling price of rice belonging to the prov. A. D. funds	315
38.—Net selling prices and cost of new purveyances of rice, for the prov. A. D. funds	314
39.—Comparison of the average booked prices and the real prices of the prov. A. D. funds' rice	320
40.—Comparison of the average real price and net sale price of the prov. A. D. funds' rice	320
41.—Comparison of real prices and prices of new purveyance of prov. A. D. funds' rice	322
42.—Comparison of booked prices and real prices of the central fund's rice	325
43.—Comparison of the market price and real price of A. D. funds' rice	328
44.—Market price of rice in Tokyo, Osaka, Nagasaki, 1868-86	330
45.—Calculation of the real selling prices of gov. bonds belonging to the prov. A. D. funds	333
46.—Exchange quotation of gov. securities on March 23, 1886	335
47.—Comparison of interest from gov. securities belonging to the prov. and cent. A. D. funds	338
48.—Total loss on rice business of the A. D. fund.. .. .	343
49.—Uninsurable damage to crops in Prussia, 1878-80	354
50.—Injuries to crops by noxious animals, insects, and plants in Prussia	358

51.—Comparison of grain produce in the 4 principal cereals in Prussia in 1878 and 1883	362
52.—Comparison of money produce of the crops of 1878 and 1883, in Prussia, for the 4 principal cereals	363
53.—Protective tariffs for the 4 principal cereals	366
54.—Amounts insured in agricultural fire, hail, and cattle insurance, in Germany, 1881	370
55.—Extent of cattle insurance in percentages of the live stock, in Prussia, 1883	372
56.—Injuries done to crops by acute and chronic causes, in Prussia, 1878-80	375

Tables after the text page 388: Nine sheets on the
“system of Agricultural distress funds in Japan.”

To page:

Working of the Agricultural Distress funds, 2 sheets:

First sheet:

Tab. 1.—Amount in cash of the relief granted	287
Tab. 2.—Number of cases relieved.. .. .	288
Tab. 3.—Average amount of the reliefs.. .. .	290

Second sheet:

Tab. 4.—Mean amount of relief granted to a family assisted in all the different ways.. .. .	293
Tab. 5.—Number of families assisted towards building cottages and the causes of their want	293
Tab. 6.—The amount of relief (inclusive of loans for the payment of the landtax) given according the causes of distress	294
Tab. 7.—Status of loans for the payment of the landtax.. .. .	295

**Income and expenditure of the Agricultural Distress
funds, 2 sheets;**

Third sheet:

Tab. 8.—Income, expenditure, and status of property of the Prov- incial funds	297
--	-----

Fourth sheet:

Tab. 9.—Income, expenditure, and status of property of the Central fund	302
Tab. 10.—Statement as to the grant from the Central fund to the Provincial funds	304

Management of the property of the Agricultural Distress funds, 5 sheets:

Fifth sheet:

Tab. 11.—A. and B. Manner of investing the property of the Agricultural Distress Funds. (A. the Provincial Funds; B. the Central fund).	306
---	-----

Sixth sheet:

Tab. 12.—The grain business of the Provincial funds	312
Tab. 13.—Calculation of the real price of the Provincial funds rice ..	314

Seventh sheet:

Tab. 14.—The grain business of the Central fund	323
Tab. 15.—Calculation of the real price of the Central funds rice ..	324

Eighth sheet:

Tab. 16.—A. and B. The Agricultural Distress funds business in Government securities. (A. the Prov. funds; B. the Central fund)	332
Tab. 17.—A. and B. Interest derived by the Agricultural Distress funds from Government securities. (A. the Provincial funds; B. the Central fund).	337

Ninth sheet:

Tab. 18.—Interest derived by the Provincial Agricultural Distress funds from deposits	338
Tab. 19.—The property of the Provincial and Central funds together, and the methods of investing it on March 31., 1886	340



Japanese-English Glossary.

Bakufu, Commander-in-chief's tent (from *baku*, curtain, and *fu*, rendez-vous, whence orders were given), name of military government of the Tokugawa family (1603—1867).

Bikō chō tsiku kin, money laid by and kept for bad harvests, Agricultural Distress fund.

Bu, Division.

Bun ken tsuu ko, learned dictionary, Jap. translation of Matwanlin's famous Chinese Encyclopedia.

Chiji, till the law of Sept., 1886, for the organization of provincial governments, the prefect at the head of one of the 3 capitals (*fu*); after that law a prefect at the head of a *fu* or *ken*.

Cho, 1. a measure of length, the 36th part of a *ri*, = 109.091 metres.
2. a square measure, = 99.1736 Ar, hence equal to one Hectar in round numbers.

1 *Cho* = 10 *tan* = 3,000 *tsubo* = 108,000 Japanese square feet.

N.B. The square cho has *not* been developed from the long measure cho by squaring the latter, for it is not the 1296th part of the square *ri*, as would be the case if it were calculated on the basis of the long measure cho; it is only the 1555.2 part of a sq. *ri*.

3. Street with houses, hamlet.

—cho, 1. Office, for inst. *Kencho*, Provincial government.

2. Director, for inst. *Guncho*, director of a gun, sub-prefect.

Choson, administrative unit, mostly of several villages and hamlets, community. A law on communal constitution, *Chosonse*, on the basis of a draft by Landrichter A. Mosse, was issued on Apr. 25th, 1888.

Dai, great; for inst. *daijin*, great vassal of the emperor; *daijo*, highest administration.

Daijo-daijin, Prime minister, Imperial chancellor, a dignity which was abolished on Dec. 26., 1886, at the reorganization of the highest boards.

Daijo-kuwan, highest State Board, first instituted in the period of Taihō (701—703 A.D.) after Chinese prototype, renewed after the restoration

of the imperial power with 3 *Daijin* at the head, the *Daijo-daijin*, prime-minister, *Sa-daijin* State minister on the left, and *U-daijin*, State minister on the right, and the chiefs of the highest departments, the actual ministers, as members. Thus until Feb. 28, 1880. Then the ministers hitherto in office became *Sangi*, Privy Councillors, and the *Daijo-kuwan* a privy council, of which the ministers in office were not members. By an edict of Oct., 1882, the former constitution of the *Daijo-kuwan* was re-established. When again an alteration of the organization of the highest offices, took place on Dec. 26., 1886, the *Naikaku*, or Cabinet, took the place of the *Daijo-kuwan*, the cabinet consisting of the ministers in office with a prime-minister at their head.

Dai-ku, great district.

Daimiyo, daimio, According to the Chinese character :—great name, feudal princes since the time of the Minamoto Shoguns (see *Shogun*) at that time *miyo* meant landed property, (although even then written with the Chinese character meaning "name") which produced 13 *koku* of rice; dai-miyo an owner of many such properties.

Djochi-i-in, a permanent plenipotentiary representative.

Diuzi-tsūko, time studies, Jap. translation of the Chinese Encyclopedia of agriculture and gardening "Chéou chi thong khao" (See pp. 258. 261-262).

Dōzō, a building with fireproof clay walls, clay doors, and clay shutters.

Fu, Capital, designation of the 3 cities, Tokyo, Kiyoto, and Osaka.

Fu-ken, capitals and provinces combined, *Fuken bank*, a bank for the management of the communal loans of the capitals, provinces and smaller communal self-governing bodies.

Fu-ton, a soft wadded rug, serving as a bed.

Gampi, a plant, from which the *gampi*, or *gampishi*, *gampi* paper is made, *Wickströmia canescens* Meisn. or *Passerina gampi* (see the Official Catalogue of the Japanese division of the Philadelphia Exhibition, by Prof. Dr. G. Wagener p. 84).

Ginko, bank.

Gisoo, lit. philanthropic granaries, rice granaries for distress.

Go, a measure of capacity=0.1804 liter, forms the 1000th part of 1 *koku*.
1000 go=100 sho=10 to=1 *koku*=180.3907 liter.

—**gori**, a county (sub-prefecture), same as *gun*. In compounds,—gori; standing by itself *kori*.

Gun, a county.

Guncho, Sub-prefect.

Gun-bu-kuwai, representative assembly of several counties combined,
see p. 226 note.

Gun-kuwai, county-council, (not yet in existence).

Gun-son, counties and villages, the "country" as distinguished from
"town."

Han, the old historical daimiates, in 1872 replaced by the administrative divisions of the *kens*, with the exception of the Liu-kiu-Han, which was transformed into Okinawa Ken as late as 1878.

Hara, heath, barren land, "forests and mountain-meadows, grassy slopes especially. at foot of higher volcanoes" (Rein).

Hokkaido, Island between 146°07' and 139°11' E. Long. of Greenwich, and between 41°21' and 45°30' N. Lat., taking its extreme points. See also p. 194.

Hookiteyo, collection of laws.

Hooseikiyoku, bureau for compilation of laws, legislative commission.

I-den, Rankland, land given for use according to the rank of the dignitary.
(Land given to officials in lieu of salaries was called *Shoku-den*.)

Jobisoo, Reserve rice granaries.

Joheikiyoku, Bureau for levelling the price of rice.

Joheishi, do. do.

Joheisoo, rice granaries for the levelling of the price of rice.

Kaitakushi, Colonization bureau, existed from Aug. 15. 1869 to Febr. 1882, for the administration and colonization of Hokkaido, by the side of and independent of the ministerial constitution. From Feb., 1882, to Jan., 1886, Hokkaido was included in the ken-constitution; afterwards however, the Hokkaido-cho, Hokkaido-bureau was instituted with greater independence than the ken-cho, but with less than the former Kaitakushi.

Kampo, Official gazette.

Ken, Department, province. The number of ken has repeatedly varied in consequence of amalgamations and partitions.

Ken-rei, Provincial-prefect; an official title abolished in 1886, still generally customary.

Kensatsu-i-in, inspector.

Kinsatsu-Hiki-Kaye-Kosaishosho, government bonds issued for the redemption of paper money.

Kocho, headmen.

Koji, means by which saké is fermented, obtained from rice by sowing the spurs of seeds of *Eurotium Orisae Ahlbg.* The definition of the fungus by Ahlburg is to be found in Vol. 16. of "Mittheilungen der Deutschen Gesellschaft für Natur-und Voelkerkunde Ostasiens," pp. 252 and seq., and further the description of the Koji preparation by Korschelt *ibid.* p. p. 240 and seq.—The translation of the word Koji by "riz avarié," as in the *Résumé Stat. de l'Empire du Japon* I. 113 and II 124 is incorrect and misleading.

Koku, A measure of capacity = 180.3907 liter. For the denomination of its decimal parts see under *Go*.

Kokuso-in, Corn granary bureau.

Komon, expert, counsellor; highest title obtainable in Japan by a foreigner.

Koseki, register of population; *Koseki-rio*, office for the registration of population, subordinated Apr. 17., 1876, to the Ministry of the Interior, as *Koseki-kiyoku*, bureau for registration of population.

Ku, circle, district, denomination of town districts as distinguished from counties (*Gun*).

Ku-bu-kuwai, representative assembly of several town districts combined. See p. 226, note.

Ku-bun-den, mouth- share-land, government land given for use according to the number, age and sex of the members of a family.

Kuwai, meeting, *Fu-Ken-kuwai*, provincial diets, representative assemblies of the cities and provinces.

Kuwan, 1. bureau; *daijo kuwan*, bureau of the highest administration, see above.

2. buildings.

Kuwazoku, lit. flower-families; comprehensive title (since July 25., 1869) to the highest court and feudal nobility, the "kuge" and "daimiyo" together.

Kuwazoku-kuwai-kuwan, nobles club, owner of the largest Jap. bank (the 15th National bank, nobles bank), a nobles school for boys, ditto for girls, a clubhouse, &c.

Meiji, enlightened administration, official name chosen Oct. 23., 1868, by H. M. the present Emperor, after an old Jap. custom, for his reign: 1888 for inst. is called the 21st year of the period of Meiji.

Mikan, orange.

Minbu Rin In, rice granary bureau.

Mommu-tenno, Empress Mommu 697-707 A. D.

— mura, village, synonymous with *son*.

Naimusho, Ministry of the Interior, existing since Nov. 1873.

Nippon, Japan.

Nippon Ginko, Imperial bank, joint stock company, under 2 governors appointed by the State, since June, 1882.

Noshomusho, Ministry for agriculture, industry and commerce, since Apr. 1881.

Okurasho, Ministry of Finance, already in existence in the oldest constitution of the Daijokuwan.

Onchi, land for fruit-trees, garden land as distinguished from rice and arable land.

Ri, 1. a long measure = 3.9273 kilom.

2. a square measure = 15.4235 sq. kilom.

1 sq. ri = 1555.2 cho = 15552 tan = 167,961,600 Jap. sq. feet.

Rin, a coin, the 1000th part of 1 yen, (see the latter).

1000 rin = 100 sen = 1 yen.

Saké, rice wine.

Seibiobo, Harvest register.

Sen, a coin, the 100th part of a yen (see latter).

— shimbun, — shimpo, newspaper.

Shizoku, noblemen, members of the (former) warrior and official caste.

Sho, a measure of capacity, the 100th part of a koku

1 sho = 1.8039 liters.

Shogun, commander in chief of the Empire, appointed temporarily by the Emperor, duke. Until Yoritomo (1186—1200 A. D.) only commander of the army; after the time of Yoritomo, the founder of the feudal system, usurper of all the political power belonging to the Emperor; hereditary

temporal rulers of Japan; from 1186 to 1233 the Minamoto Shoguns; from 1235 to 1573 the Ashikaga Shoguns; from 1603 to 1867 the Tokugawa Shoguns.

Shooku, small district.

Shooku-cho, prefect of a small district.

Shooku-kuwai, meeting of representatives of a small district.

Shoyu, a sauce, prepared from a small bean the "*Dolichos soja*" or "*Soya hispida*" with the addition of barley, salt, and water (See the Philadelphia. Exhib. Catal. p. 112).

Shikai, towns, as distinguished from the open country. A law on municipal constitution "Shisei," on the basis of a draft by Mr. Mosse, was issued on Apr. 25, 1888.

Sodai, representative of an association of any kind; for inst., of an association of persons within a community, or of an association of communities, &c.

Son, village.

Son-kuwai, representative assembly of a village community.

Taihô, name of a period lasting from 701—703 A. D.

Taihô-riô, the collection of administrative laws of the Taihô period.

Tan, a sq. measure = 9.9174 Ar.

10 tan = 1 cho; 1 Tan = 10 se = 300 tsubo = 10800 Jap.
sq. feet.

— tenno, Emperor or Empress.

To, a measure of capacity, the 10th part of a koku.

1 to = 18.0391 liters.

Tokugawa, Name of the princely house, which usurped the temporal rulership from 1603-1867.

Tsubo, a sq. measure, the 300th part of a tan = 3.3058 sq. metres.

1 tsubo = 36 Jap. sq ft.

Yen, 1. a gold yen, weighs 25.72 grains; purity 0.9.

2. a silver yen " 416 " ; " 0.9.

3. a Nippon Ginko yen bank-note, always exchangeable there for one silver yen.

4. a paper yen must be accepted by all government offices, and for all payments as "one yen." Its redeemable value in silver or gold is not expressly stated. In 1876 (at the time of a great

excess of exportation) the paper yen was at a premium of 4 p. c. above the silver yen, after the Satsuma rebellion, at a time of an increased issue of paper money, and a great excess of importation paper money fell greatly in value below par; during the last few years under favourable conditions of exportation, with a less amount of paper money in circulation, and after the intervention of the banknotes of the Nippon Ginko, issued in consideration of the needs of the money market, the paper yen has been always at par with the silver yen. The fluctuations of the relations of the values of gold and silver naturally affect the value of the paper yen.

- 1 silver yen = 2 silver florins, formerly always reckoned equal to about 4 marks, now in reality worth 3 marks only.

Yezo, Yesso, lit. barbarians, name for the Ainos and their land; formerly therefore applied to the northern part of the Jap. main island, then inhabited by Ainos, now generally used for Hokkaido alone.

Zakoku, mixed grain; comprehensive name for beans, buckwheat and 3 kinds of millet (*Awa*, *panicum italicum*, *Hiye panicum corvi*, and *Moro-koshi*, sorghum vulgare, a grain called in European custom tariffs Durrah or Dari.)

Register of Authors.

	Page.		Page
Ahlburg	..xxiv	Mascher	270
Brämer	365. 369. 370. 371	Matwanlin	258. 261. 263
Bötzow	98	v. Miaskowski	356. 360. 372
Dove	195	Morita	63
Du Bousquet.. .. .	243	Mounsey	243
Ehrenberger	93. 97	Naumann	243
Engel	221. 230	Nightingale	232-234
Evert	357	Okuma	265. 271
Griffis	243	Ratkowski	Preface viii
Gubbins	260	Rau	229. 238. 239. 247-249
Haag	169	Rein	xxiii
Hisamatsu	63	v. Rönne	11
Jollos	259	v. Rohrscheidt	259
Kato	63	C. Roscher	90. 92
v. Klöden	232	W. Roscher	160
Korschelt	..xxiv	Sartorius von Waltershausen	200
Kuntze	105	Schäffle	360
v. Langsdorff	173	Scharpff	372
Le Gendre	230. 243. 251	Schmidt	45
Léon d'Hervey- Saint-Denys }	.. 258. 261-262	Schwarzbach	234
		Thiel	379
		Wagener	xxii
		Wagner	353

OPINIONS OF THE PRESS.

Neue Preussische (Kreuz) Zeitung.
First supplement of the 17. March.
1889. Agricultural Literature.

A work of great importance. It is highly interesting, because it bears witness to the energetic striving of Japan to rejuvenate its senescent culture by the appropriation of the material gains, and the adoption of the outer forms of the civilization of Christian Germany. But its **especial importance** lies in the fact, that *a great part of the proposals here made for Japan are worthy of consideration for Germany also.* It must therefore be earnestly recommended as a book deserving of careful study by all those who have at heart the welfare of our own home agriculture, and of our own home land-proprietors, especially the smaller ones... The principal part of the book consists of a memorial prepared by Mayet by the request of his chief, and presented to the Home Department, containing proposals for the amelioration of the condition of the Japanese farmer, who at present labours under many adverse circumstances. The measures proposed are in brief as follows:—

1. Insurance of the farmer against

injuries to his crops, his cattle, his implements and buildings, by the establishment of mutual insurance associations.

2. The establishment of Savings Banks and Savings Unions in connexion with the Post Office Savings Bank already existing in Tokyo, and together with this
3. The foundation of Land Credit Institutes which shall provide that the farmer does not fall into the hands of the usurer.
4. The liberation of the peasants, who have already fallen into the hands of the usurer, by converting their debts into redeemable, otherwise fixed, mortgage debenture debts and the establishment of arbitration boards for this purpose. It is proposed that all these institutions should be connected with the existing administrative units, *Chōson* (commune), *Gun* (county), *Ken* (province).

The insurance of the agriculturist is treated of as a collective insurance against all injuries which threaten his property. The Insurance is not only to embrace all the acute dangers, such as fire, water, earthquakes, typhoons, &c,

lc, but, as far as the crops are concerned, a total failure of the harvest arising from causes of a chronic nature. The idea of insurance against failure of crops was suggested in Japan by a custom which has existed there from ancient times. *Japan possesses an Agricultural Distress Fund.* This originated in the rice store-houses against famine (*gisō*) and in the rice store-houses for equalizing prices (*jōheisō*), which existed centuries ago in China and were thence introduced into Japan, very similar to those which Joseph introduced into Egypt for the same purposes. This latter fund, which is now no longer collected in rice but in money, has, it is true, as its only object, the distribution of alms to peasants who have become impoverished through failure of crops. The income of this fund does not suffice for anything beyond this. For saving the farmer who is threatened with ruin this fund is insufficient, hence in order to accomplish this purpose, *thorough-going measures such as the author proposes must be adopted.*

In the appendix we have proposals for the colonization of the Hokkaidō island of Yezo), for the commutation of the tenant farmers' lease rents, the limitation of the Land Tax and the establishment of a Land-Cultivation-Annuity-Bank; and further, proposals by which both this and the Agricultural distress Fund (of the application of which up to the present time very full statistical tables are given) may be used as a *point d'appui* for the projected institutions. **For Germany, the idea of col-**

lective insurance and the proposals for the alleviation of debts **are most worthy of consideration.** *But the remaining portions of the book will also be of the highest interest and utility to the German agriculturist, because its concise and yet exhaustive ways of putting things makes it admirably adapted to impart information on the system of Agricultural Insurance.* We hope this excellent book will find many readers.

v. K.

Westpreussische Landwirthschaftliche Mittheilungen. (Organ of the West Prussian Farmers' Union). 28. February, 1889.

The present work presents to the eyes of most readers a quite new and unexpected picture. We see from it that the social and economical conditions of Japan are in many respects not only not inferior to those of the civilized states of Europe, but actually begin to surpass them...To the Agricultural Distress Fund which has existed since the 15th of June, 1880, the State gives a considerable contribution, and the landowners of the various provinces contribute themselves, in an addition to the Land Tax, a sum at least equal to the amount of the State Contribution. On the 31st March, 1886, the Agricultural Distress Fund already possessed over forty millions of marks, and from 1st January 1881 to 1st March 1886 over 13 millions of marks were paid in relief-disbursements. *It is a matter for the most careful consideration, whether*

how far, this system of insurance, which is most thoroughly set forth in all detail, could be extended to Germany as well, and whether it would be able to give material help in combating the adverse circumstances which oppress German Agriculture.

This work further contains very interesting treatises on Systems of Credit, Organization of Savings Banks, Colonization &c; and consequently, it contains **an extraordinary amount of information** for every thoughtful German agriculturist or political economist; and we can **most confidently recommend it to their most careful study.**

Oesterreichische Versicherungs-Zeitung. International Insurance Organ. Edited by A. Ehrenzweig. 9th March, 1889. Feuilleton, "Assurance in Japan."

Asiatic Prussia marches with seven-league-boots: its moral conquests in the Far East have been such that a few years of reform have accomplished the labour of centuries. That Insurance should make its appearance amongst the results of civilization, is self-evident, for the noblest blossom of cooperation must not be wanting to progress; and it is again the German spirit, that goes before and holds up the torch of ideals, which though they may not be realized in their entirety, will certainly leave behind them their traces in the reconstruction of the country. *If only a part of Mr. P. Mayet's programme be carried out, property will*

still obtain very considerable protection. What is utopian will be erased as soon as it begins to be put into practice, and even then there will remain **enough realisable matter** to extend the blessings of insurance, so fruitful is Mr. Mayet in ideas and original doctrines. ...The book (*which is beautifully printed*) contains numerous statistic tables, and the rich material is so happily arranged that even the European reader quickly finds himself at home in the consideration of foreign conditions. Intended primarily for the Japanese public, we can easily understand that the author *avoids all learned jargon* and makes it a point to define the fundamental conceptions, and to exemplify them one and all by means of instances drawn from Japanese life. It is also self-evident that the author shows a great preference for Germany as a model for imitation.....

Der Versicherungsfreund und Allgemeine Wiener Post. (Popular magazine for Insurance and Political Economy.) 7th March, 1889, p. 5.

... a work which we recommend to the most careful study of all those who wish to obtain information about the *circumstances and causes of agricultural distress* as well as the *ways and means of combating the same*; and the *fact that the present work, from its nature, concerns itself principally with the circumstances of Japanese agriculture, serves to make it all the more interesting*, in as much as the European

critic not only obtains a deep insight into the social conditions and public institutions of Japan, but also gains much information on the subject in general. For many of the causes, from which originates the distress now felt by European, and more especially by Austrian and German agriculture, make themselves felt in a quite analogous way in the distant Empire of the East. *And many of the measures which have been taken there for the combating of the evil, might also be recommended for imitation here*; as, e.g. the institution of the so-called "Agricultural Distress-Fund" (Missernten-Deckungs-Fond) as it exists in Japan...By "Agricultural Insurance" he understands—and this it is that makes his work especially **instructive and interesting for the actuary**—something more than simple Hail-insurance...We can...**only recommend it most heartily to the studies of our readers.**

Leipziger Zeitung. Scientific supplement. No. 30. 12th March, 1889. p. 120.

This book can well justify its claim to a long-winded title, for it contains a complete programme of far-extending innovations in national economy for a whole people. In order to be in a position to lay this work before the Japanese Government the author required *a complete mastery of political and social science in its latest western developments, an accurate knowledge of the conditions of Japan, and an*

originative inventive capacity in this branch of learning. **It is a monument of the industrious acute German spirit, and we could not wish for a better as a testimonium ingenii germanici in the Far East.** But its value for that strange people which has so fabulously quickly made conquest of our civilization is not our only criterion for estimating this book. *It also offers enough of valuable suggestions for the practical political economist of the author's native country.* For, strange to say,—and there is no better mark of the absolutely unique progress of Japan—in this book which is written for Japan, **proposals are made for the elevation of the peasantry** which are as yet altogether or partially unknown even in those countries from which New Japan is in the habit of learning. Although Mr. Mayet's proposals for Savings Institutions, Land Credit, and the Commutation of Debts are grounded on institutions which in Germany have already proved their utility and value (Communal Savings Banks, Mortgage Debenture Institutes &c), his idea of a system of mutual **Agricultural Insurance** to the *extent* which he demands is something **quite new**. This compulsory insurance is to have reference to all acute injuries which can befall agriculture; not, as with us, only against hail, but against all the injuries which may be caused by floods, insects, diseases of plants, typhoons, &c. &c. In doing this he explains for Japanese readers the nature of Insurance with convincing clearness, but at the

same time he works out all the technical problems of insurance, as far as they come under consideration in the plan of his book; and thus he arrives at very distinctly and practically defined subdivisions of agricultural insurance, in which at the same time he points out the one possible insurance-control. Thus, e.g: **House-insurance**: against earthquakes, full insurance (because all protection is impossible); against typhoons, partial indemnification (certain acts of negligence may have increased the loss); against fire, a lower scale of partial indemnification (possibility of incendiarism on the part of the owner). It is the same with cattle and crop insurance. The whole organization of this system of compulsory agricultural insurance appears in Mayet's book accurately articulated into the various organs of the body corporate of the State, supported by the Local Governmental bodies, and graded off from a body possessing the widest possible extension over the Empire, down to Insurance Unions for provinces and counties, &c. Mayet further claims the help of insurance not only against "acute" injuries, but also against those of a "chronic" nature. This really amounts to an Insurance against Failure of crops. In a most minute enquiry into this problem, which has become most perplexingly complicated, owing to the modern development of facilities for communication, Mayet comes to the conclusion that such insurance would only be possible...with state aid. This is exactly the point in which **Mayet's**

work has the deepest interest for the actual problems of our social system. *So are also* the subsequent treatises on colonization-subjects, with special reference to the settlement of Japanese peasants in the island-province of Hokkaido. *It is, however, impossible within the limits of a short critique to do justice to the comprehensive contents of this work.* We must, however, yet call attention to the especially interesting section, which suggests manifold comparisons, on the "Liberation of the Peasant from the hands of the usurer." A section from which, *inter alia*, we gain information about the Japanese Interest Limitation Law. Prefixed to the book is the author's letter of dedication to the Imperial Japanese Home Minister, Count Yamagata Aritomo; appended is a great number of very instructive statistical tables. It is also an interesting item that the book was entirely set up by Japanese type-setters who knew no word of German.

O. T. B—m.

Der Landwirth. Schlesische Landwirthschaftliche Zeitung. Organ of the Central Agricultural Union for Silesia, edited by *Landes-Oekonomierath Korn*. Ap. 2. 1889 p. 165.

The book presents **an abundance of interesting material** relating to the economical, administrative, financial, and mercantile-political conditions of the Great Empire of Japan, which, as is well known, has reached a high grade of civilization, is restlessly

pushing on, and has many material and ethical relations with Germany. The minute description of the system of Agricultural Insurance, of Land Credit Institutions, Land Tax Relations, and also of an organization *sui generis*, i.e. the system of the Agricultural Distress Funds in Japan, make the contents of the book also peculiarly attractive for educated German agriculturists.

Württembergische Landes-Zeitung.

16. April. 1889. p. 4.

"Before us lies one of the most interesting works of economics and statistics that we have ever held in our hands. (Here follows the title). It is, to being with, interesting in itself that this book written in German, was set in type by Japanese workmen who were altogether ignorant of German; moreover, the contents of the book are such that it not only gives us information, and that, too, accurate and statistical information, on the condition of Japanese agriculture, but that it further offers us a series of views and opinions which are of the deepest interest for our German agriculture also. This is the natural result of the way and manner in which the author, a German who for many years has been in the service of the Japanese Government, brings the various forms of agricultural insurance into connection with Land Credit and Savings Institutions; and we do not hesitate to affirm that the German

government as well as the German agriculturists and insurance-specialists might learn much, very much from this book. We should have liked to have treated the contents of this book in a more thorough manner, but unfortunately the necessary space fails us, and we must therefore here content ourselves with giving a short notice of this highly interesting literary production, and hope that at some more convenient time we shall be able to come back to the subject."

G. G.

Deutsche Colonialzeitung. Organ of the German Colonization Society. 6th July, 1889. p.2 19. "The section comprising pp. 215-243 is concerned with the organized colonization of the Hokkaido, the northern island of Japan, which is so much feared on account of its inhospitable character, and especially on account of its raw climate. For this purpose the author tries to utilize the Land Credit Institute, after the Schulze-Delitzsch plan; and *we must say that his proposals deserve all attention; and that they are not without importance for the organization of German emigration."*

Norddeutsche Allgemeine Zeitung. Morning Edition, 26th March, 1889.

"The book has an interest which is by no means limited to Japan, and Mr. Mayet's proposals could easily be generalized and adapted to the circumstan-

... *of other countries*, as the author has not omitted to point out in the case of Germany—his native country."

Zeitschrift für deutsche Volkswirtschaft. Organ for economical associations of every kind, Berufsgenossenschaften. Chambers of Commerce, guilds, &c., 1889. No 1- pp. 27-29. ... "Amongst those (proposals for the improvement of the condition of the Japanese agriculturist) the *Postal School Savings Banks* will be found to be a specially interesting and important institution. On this subject Mr. Mayet published a special treatise in 1886." ... "A specially interesting section of Mr. Mayet's work is, finally, the IVth section, in which the *system of the Agricultural Distress Funds in Japan* is described... The whole work, shewing as it does great industry, written with conspicuous clearness, is a monument of the sturdy political and economical education not only of the author, but also of the higher government authorities of his country; at the same time, by a just adaptation to German system and example, it gives us a pleasing picture with what insight and success the world-old island kingdom of the Far East follows in the path of true progress even in its political and social systems."

L'Union Postale. Journal publié par le Bureau International de

L'Union Postale Universelle. Bern, Oct. 1. 1889. pp. 164-167.

"The Post Office Savings Bank business in Japan seems about to develop in a novel direction.

"We have before us an interesting book by Mr. P. Mayet, late Professor at the Imperial Japanese University in Tokio and Councillor to the Imperial Japanese Ministry of Finances, which treats of "Rural Insurance, in connection with Savings Banks, the mortgage of lands, and the payments of debts." This book, which was printed by order of the Imperial Japanese Minister of Communications, contains a proposal to establish *Parochial Post Office Savings Banks*. These new Savings Banks are chiefly meant for the use of the rural population of Japan, and the author would like them to be organized on exactly the same plan as the Postal School Savings Banks for the working of which he has invented a special simplified system. Unfortunately we do not possess as yet the book written by the same author on Postal School Savings Banks, and published by the "Pedagogical Association of Japan," in which he explains how, by means of different kinds of specially arranged savings-stamps, some bearing interest and some not, all writing, accounts, and calculation of interest could be dispensed with by the local School Savings Banks, while even the keeping of the accounts of depositors at the Central Savings Bank would be unnecessary. We are, therefore, unable to acquaint our readers

with the special features of Mr Mayet's system of School Savings Banks, and have to restrict ourselves to a statement of what the author says about Parochial Post Office Savings Banks in the first mentioned book."

After a detailed reproduction of the proposals, "*L'Union Postale*" concludes its article:

"It is clear that such an extension of the Post Office Savings Bank system to the smallest village would give a powerful impetus to the Government Savings Bank business, and would rouse and promote provident habits among the rural population to an enormous extent. We may well therefore await with interest the decision of the Imperial Japanese Government with regard to Mr. Mayet's proposal. If adopted, Japan will possess an institution such as no European State can up to the present boast of."

Blätter für literarische Unterhaltung, pp. 407-8. Literature of political economy.

"...The condition of the proletariat in Eastern Asia has for a long time been a miserable one, but quite new is the social question, i.e. the contrast between rich and poor, between formal increase of rights and material increase of misery, the consciousness of which is ever making itself more felt." ... "How is change here to be brought about? Mayet answers

us, by the introduction of a well ordered system of agricultural insurance by the establishment of Savings institutions and by the furnishing of land-credit at cheap rates and on long terms." And in fact, *two of the principal factors of the agricultural distress in Japan seem to be met by these proposals*. An insurance against unavoidable external accidents such as only partially exists as yet in Japan, is there far more important and necessary than in West Europe, because the number and variety of the destructive natural phenomena is very much greater: e.g. drought, wet-seasons, typhoons, earthquakes, epidemics, floods, fires (wooden houses), hail, landslips &c. *In a well arranged, national mutual insurance against all these and other possible dangers which threaten the farmer (death of cattle, ravages of insects, &c), we may see a factor of reform which is both economically and socially beneficial.*" ...

"Usury in Japan seems to have reached a terrible height, and speedy remedies are necessary." ... "As a matter of fact there is another burning question with which our author familiarizes us in the capacious appendix to his book (pp. 285—420); and which for various reasons arouses in us a greater interest than do the proposals and arguments of the main book. It is the question of protection against failure of crops, which has found its solution in the re-establishment and expansion of an Agricultural Distress Fund. A greater part of the Japanese (and Chinese) population is, we must

remember, so low in the scale of property that every disturbance of their occupation through accidents of any kind brings them at once to the verge of ruin. In order to prevent such a periodic ruin of large sections of the population, the States of the Far East have for a long time made use of a compulsory State insurance on most thoroughly socialistic lines. It is to Mr. Mayet's credit to have worked up into a well organized system the principle of such a compulsory method of communistic insurance, which he found already in existence; and that this system, which owes its origin to his suggestion, has been at work since 1881, and that it has already produced the most beneficial results—as he himself also points out to us.

This part of the book is of interest not only because it gives us the best insight into the peculiar circumstances of agrarian Japan, but also because the remedies described in it *are not without practical interest for our European agriculture.*"

Unsere Zeit. German Contemporary Review. 1889, pp. 540—546.

Heinrich Adler, agriculturist in Brixen, in an independent essay "*Die Fakultative Naturalgrundsteuer in Finland and Japan*," makes the following remarks on a point which is only briefly treated in Appendix III of Mr. Mayet's book ("The Diminution of the Land Tax"):

"In the above-mentioned work Mayet makes suggestions which seem to us to *be specially worthy of attention on account of their utility and novelty*, so much so that we do not think that we ought here to pass them by... *The latter idea* (the institution of rice-subscription tickets) *is quite original, and its introduction is not only confined to rice alone, but is possible with other kinds of grain as well*; we therefore feel that we must devote more time to its consideration."...

Adler afterwards ends his remarks with these words:—

"Our short notice of the Japanese system of facultative payments in kind will, we hope, have had some value for the European economist as well. We should not be deterred from it by the difference between the conditions of Japan and those of Europe. For, as is well known, Japan, owing to the reforming activity of its government, is continually acquiring more of a European character; and besides, Mayet's proposals are based on accurate acquaintance with both, Japanese and European financial administration and policy."

Der Ostasiatische Lloyd. Organ for the German interests in the Far East. Shanghai, 4th January, 1889. pp. 381-384.

... "The magnificent development of Japan is, as we have already had occa-

sion to say, pretty widely known in its general features, but it is not so often that outsiders like ourselves obtain a glimpse into the restless unwearying development of the Japanese political system—a development in which, we are glad to say, German scholars and specialists take a most prominent part...Mr P. Mayet...has the reputation of being one of the best, and, above all things, one of the most practical connoisseurs of Japanese Political Economy. He is perhaps the most fruitful author in this department—and the Japanese Economy and Agriculture owes much to this German scholar...For the merit belongs primarily to those who with indefatigable labour put together the first stones for the new edifice, for the indispensably necessary foundations of the further development of a land in one or more departments; and Mr. Mayet is one of these pioneers.

His work, "Agricultural Insurance," speaks for itself. It is written for those Japanese agricultural circles, official as well as private, which will certainly know how to derive much advantage from the maxims of sound political economy laid down by Mr. Mayet, and adapted even in details to the special circumstances of the country. ...Preface and Introduction thoroughly explain the *raison d'être* of the book. The author makes special reference to a whole array of his already completed works directly or indirectly bearing on the subject in hand, and bearing witness to eleven years of unintermit-
tent study of the matter. It would

take us too long to examine all the sources so laboriously collected by the author; it is however a matter of astonishment how in spite of it all, in spite of numerous preparatory works (not merely studies!) the author still shows an *unsurpassable clearness of arrangement and description*. It is this which justifies us in describing the book as one deserving *immediate practical realisation*, in spite of the far too modest opinion given by the author in his preface that this work must only be considered as a preliminary 'feeler' in this department. It is indeed self-evident, as the author goes on to say, that a long series of special works is needed for the completion of the system: this work nevertheless retains its *eminently practical importance*, as even a non-specialist who glances through the various chapters can easily see...It is beyond doubt that from an historical point of view the book on Agricultural Insurance in Japan *will have a deep interest for wide circles in Germany*, if only to show to the foes of the agrarian movement to obtain state help as a rule and not as an exception, that *certain truths of the doctrine of agricultural insurance must remain the same under all circumstances of approximately similar climatic zones...*"

Zeitschrift des Königlich Preussischen Statistischen Bureaus. 1889. No. 1, p. 79.

Mr. E. Blenck, Geheime Oberregierungsrath, Director of the Royal

Prussian Statistical Bureau, in a review signed with his own name, writes as follows:—

“The author, who has been for a number of years in the service of the Japanese Government, and is already well known to us by a series of books, translated into various Languages, on the various internal relations of the Island Empire of the East, and especially on its system of Insurance, Policy, Finance, Savings Banks, and on its Population Statistics, a native of the German Imperial Capital, has, after researches and preliminary labour extending over more than ten years, undertaken in the present work to furnish material for satisfying the complaints of the agricultural classes, which even in Japan are becoming louder and more pressing, and for answering the question, how this state of affairs is to be most effectually improved...By *agricultural insurance he proposes to meet all injurious natural phenomena*, to protect the cultivated soil and its products, not only against every possible acute danger, but also—with State aid—against chronic dangers. In connection with this he teaches from the example of Germany and Japan that the acute natural calamities have an influence (often undervalued even amongst ourselves) on the bad condition of agriculture, and especially on the gradual crumbling away of the peasantry; whereas, on the other hand, modern facilities of communication have had it as a result that the prices of agricultural produce have been kept comparatively

low, even after a failure of crops, and have made it impossible for the peasant to recover himself by higher prices.

In establishing his proposals the author proves himself to be an enquirer and political economist, not merely of wide learning, but one who is especially familiar with the history of the economical development both of his old and his new country, and as a man of practical aims.

The agricultural needs of Japan bring him farther to speak of the colonization of Japan proper and Yezo (Hokkaidō). In the latter case *his proposed plan of procuring funds by the cooperation of a Colonization Bank, on the one side, and, on the other, of mutually responsible cooperative groups of individual colonists, the latter similarly related to one another, deserves the widest consideration*. His researches are supported by a rich reference-material, consisting of 56 statistical tables in the text, and 19 appended sheets. A Japanese-German vocabulary, which gives us information about a large number of organization questions and State institutions in Japan, as well as about the systems of measures, weights, and coinage, forms the conclusion of the book.

For further information we must refer the readers to the interesting book itself. We can, however, most heartily recommend it to all those who have at heart the cure of rural distress, and the recovery of Agriculture, which is now even with us in Germany at a crisis.”

Finanzarchiv. Series 6, Vol. I., pp. 459-464.

Professor *Schanz*, the editor of the *Finanzarchiv*, writes over his own signature :

"It is a well known fact that political economists have often obtained the germs of new ideas from a closer acquaintance with the institutions of other lands. The charm of novelty, the comparison with home circumstances has a fruitful effect; many adaptations, many new threads of organization, are there found and further spun out, such as would not have come into the light in the surroundings of home. Mayet also belongs to the scholars who work amidst foreign surroundings. In his Preface he gives us a picture of his various studies, how they grew out of his official position, first in the Ministry of finance and later in the Home (?) Department, and out of the consequently necessary familiarization with Japanese circumstances and legal reforms. Some of these studies are indeed well known in Germany, as the Collective Insurance for Buildings in Japan, and the nice work on the Japanese National Debt.

The present work also is much concerned with financial problems, and so, in accordance with the character of this journal, we will take these problems as our starting point and in connection with them make reference to the other wider contents of the book. We therefore turn our eyes to a section of the work which is in

the form of an appendix. It is entitled: "The diminution of the Land-tax"...

After a detailed review, Prof. *Schanz* says: "We can easily believe with Mayet that the excessive land-tax is the most serious obstacle to the progress of Japan, and that the development of other sources of income (Monopoly on *Sake*, higher taxation of non-landed-property) is most necessary."

Professor *Schanz* closes his review of the Land Tax Prolongation in years of failure, and of the deferred instalmentwise payment of the same, with the following words:

"By this arrangement of matters the burden added to the ordinary burden of the Land Tax by the burden arising out of prolongation could never be more than ten per cent of the former. This system of prolongation, which was limited only to rice land, was insufficient and unsatisfactory because it noticed the individual distress only in case of distress of the whole village, and for the latter required proof of the excessive rate of 50 per cent of the average crop assumed in the assessment of the Land Tax. It had also the fault of increasing the burdens of the taxpayers after bad years; whereas these were too thoughtless to lay by for times of want in good years. It was in consequence of Mayet's proposal that the Agricultural Distress Fund was established for this purpose in 1880.

For this Mayet had made use of the Remission Funds, as the French Land Tax Law of 1790 and 1798 knows it, and which for a long time existed in the Genevan Statute Book, and is still retained in Westphalia and the Rhine Provinces, where it is supported by a 2 per cent addition to the Land Tax. The Japanese Minister of Finance assigned for the fiscal year 1879-80, 3 per cent of the land tax (=1,200,000 yen) for the purposes of the fund; the addition of the Land Tax amounts to the same. These large sums had to be provided for because in Japan more serious natural phenomena such as floods, droughts, typhoons, earthquakes, have an influence upon the harvest.

This fund for covering failure of crops—it might more properly be called Agricultural Distress Fund—does not by any means exist solely for the purposes of the Land Tax; but it has a much wider scope. It furnishes such unfortunate persons as have through an exceptionally great failure of crops or through undeserved calamities such as fire, murrain, epidemics, earthquakes, landslip, come into need, with the means necessary for procuring food, huts, agricultural implements, and seed corn. For those who in consequence of the above-mentioned calamities cannot supply their own food, money for food is allowed, for a period not exceeding 30 days. For each household the money for erecting huts is at the utmost 10 yen (formerly 5); the monies granted for agricultural

implements and seed corn 20 yen (formerly 10 yen). Grants and loans towards paying the land tax are only to be given to those who, on account of these calamities, could not pay their land tax without selling their house and land. The organization is mainly a provincial one. The state, of its contributions—and the province must meet the contribution with at least an equal sum—divides 900,000 yen among the provinces, in proportion to the magnitude of their land tax payment; 300,000 yen, however flow, into the central relief fund. If the grants in aid of the sufferers and the grants and loans for the payment of the land-tax exceed two thirds of the provincial relief funds, notice of this fact must be given by the Prefects of the town or province concerned, and the additional sum has to be drawn from the central relief fund.

Mayet gives a report on the working of the Relief Fund from 1 st Jan, 1881 to 31 st March, 1886 as complete as it is interesting. In the 5½ years, grants were made to half a million families and 3.8 million individuals of 3,288,000 yen, or, without including the loans for paying the land tax, about 2½ million yen. Of this 31% covered floods, 27% fires, 25% storms, 15% drought; and other causes, such as snow, earthquakes, landslips, &c. 1%. In the first 2½ years, fires formed the most serious item, in the fourth drought, in the fifth storm, in the sixth floods. Of the buildings destroyed, 29.97% were destroyed by fire as against 70.03% by other elements.

Mayet rightly insists on how insufficient a mere *fire*-insurance would be in Japan. The grant in aid of the erection of huts was 33.2% of the total sum, for assistance in paying the land tax 30.4%. We can see that the high land tax and the impossibility of insuring the houses, are the principal causes of distress. Of the whole grant made for the alleviation in the land tax payments (1. million yen) the Provincial funds made out and out grants of only about one fifth, the remaining four fifths (777,000 yen) were granted on conditions of repayment. Further, 209,000 yen (or 6.4%) were spent on seeds, 383,000 yen, or 11.6% on agricultural implements, and 603,000 yen, or 18.4 per cent of the whole aid-money on food. The income of the provincial funds amounted to 11,387,000 yen; so that, after deducting the grants in aid, there still remained to them a capital of over 8½ million yen.

Mayet compares these Japanese agricultural distress regulations with those of other countries, and comes to the conclusion that the Japanese system is deserving of imitation even by European nations. The special bills—he particularly instances the Prussian Relief Laws—which are introduced as often as a great flood or failure affects a whole province, appear to him as an ominous charitable injustice. For what differentiates the injuries done by inundations of the Rhine from those done by other *numerous*, though smaller rivers? It is only the greater *number* of sufferers that touches the *heart* of the legislator; whereas according to the acknowledge-

ment of the Prussian ministry of agriculture, enormous injuries to cultivation are done every year on the banks of almost all the river-courses of Prussia. Why should the sufferers from Rhine inundations be relieved by the State, and not the others? The ones are as much citizens as the others. But further the relief fund as a permanent state institution would convert a financial need, which is not now regular, but which always recurs from time to time *vis à vis* cases of general distress, and which has hitherto generally been met by loans, into a *regular* need met by the taxes. These European Relief Funds would have to be fed somewhat differently in Europe and in Japan. If here it was natural to deduct a portion from the excessively high land tax, Mayet thinks that agricultural protective custom duties are a means for endowing the relief funds. Such a direct devotion of a part of the thus obtained means to the aid of the peasantry and small proprietors in their fight for existence, would find another justification for itself in the fact that protective tolls benefit, indeed, great landed proprietors, but confer little advantage upon the peasants, and still less upon the small proprietors who produce but little surplus for the market. A comprehensive agricultural insurance must be added as a complement to the agricultural relief funds. The agricultural relief funds only benefit those persons who are on the verge of agricultural ruin through unmerited elementary calamities. Agricultural Insurance is needed to keep the party concerned from

getting to the verge of ruin; such institutions are needed as will at least partially make good unmerited losses in proportion to the loss incurred as injury quâ injury, without any respect to the wealth of the farmer. **It is just in this province that our author again develops quite new ideas, which will probably find their fulfilment in the future. He shows the insufficiency of the present agricultural insurance.**

In Germany, for instance, 32 milliards of agricultural property are protected by insurance, 30 milliards of which belong to agricultural fire-insurance. But more than 95% of the cattle remain uninsured, and in the case of Hail Insurance also, only a small proportion of the harvest is actually insured. But the insurance is also insufficient with regard to the protection, which can be given to the insured property. There are a large quantity of injuries which, at the present moment, are quite uninsurable. Of the 54,907 parishes and estates in Prussia, during the years 1878-80, 14.12% were on an average injured by frost, 2.35% by drought, 9.56% by rain and wet, 2.29% by floods, 2.16% by diseases of plants and noxious weeds, 6.86 by noxious animals, 0.01% from others causes; making a total of 37.35% of all parishes. The parishes which suffered from hail were 3.5%; here, however, insurance is possible. **The author rightly asks:—Is there any technical agricultural or insurance difference between a rye-crop injured by hail or one injured by frost? Is there any between a cereal crop**

injured by hail and a meadow eaten bare by noxious insects? Why, in the case of such unmerited, and easily recognisable, calamities, should not the principle of dividing between many shoulders the burden which overwhelms the individual be applied, as well as in the case of hail?

The European economical system seems to Mayet to be illogically and unmethodically organized with respect to Crop Insurance. The author pleads for a *universal* Crop Insurance; he shows how the injurious causes change with the years. For instance, in 1878, the majority of the injured parishes in Prussia suffered from noxious beasts (3805 parishes), in 1879, from rain and wet seasons (6178), in 1880, from cold and frost (17,894), 1881 from drought (5628). Every year there is some loss, sometimes more in one place, sometimes more in another. There exists also a mixture of good and bad cases, as may be seen by comparing the number of injured parishes with that of the total number of parishes.

The idea of collective insurance is, in fact, worthy of consideration. Many things which hitherto were technically not capable of insurance provision, are brought within the scope of insurance through their being comprised in one group with other injuries. Even the difficulty of hail insurance, arising from the unequal distribution of hail, becomes less when the danger of hail is combined with other dangers. If, for instance, South Germany suffers principally from hail,

North Germany is especially visited by floods. The author is not contented with simply stating a theory, he proves and supports it even in details. He distinguishes Buildings-insurance (not Fire-insurance, but also against storms, &c.) Cattle-Insurance, Crop-Insurance. The latter again falls into two divisions: insurance against acute dangers (noxious insects, earthquakes, landslips, avalanches, waterspouts, hail, tidal waves, floods, frosts), and insurance against chronic dangers, (so-called "bad years," general failure of crops in consequence of long-continued cold, cloudy weather, irregular seasons, wet, continued drought). The technical putting into operation of the one is possible: it is an extension of the already existing hail insurance. The second is difficult, because the injury embraces the whole or great parts of the country. The author here distinguishes three grades: a lowest grade, in which the farmer alone bears the injury, and a middle and a higher grade, in both of which a reduction of the land tax occurs as well. In the highest grade the farmer bears *one* part of the burden, *one* part is met by a reduction of the land tax, and the rest by mutual insurance.

"In European countries a fixed proportionate part of the agricultural import duties should flow into the funds for meeting crop failures year in year out as a permanent endowment for them, and this source of revenue together with the contributions of the insurance premiums of the insured agriculturists, both being summed up at compound interest,

would give a capital big enough to meet the great requirements of recoupment in years of such failure."

Insurance against chronic injuries is perhaps too bold a conception, which further offers too many difficulties in its practical working out.

We must break off here, although the book contains a great deal more that is worthy of consideration in Germany."

Japan Gazette, 18th December, 1888:—

The work under consideration was compiled by Mr. Mayet at the instance of Count Yamagata, the Minister for Home Affairs, and contains proposals for the improvement of the condition of the Japanese farmer, which, so far as we can see, are eminently adapted to bring about the desired result; if, on the one hand, the farming classes can be induced to leave the centuries old groove in which they are toiling at present and to avail themselves of facilities involving a greater exertion of the intellectual faculties than seems to be considered necessary at present, and if, on the other hand, the Government can find a sufficient number of officials who will in their intercourse with the people forget that they are officials, and yet carry out the work allotted to them with military precision and exactness of detail. In the successful disposing of these two "if's" is the solution and, perhaps, the guarantee for a satisfactory solution of the question involved. Mr. Mayet shows

a talent for organisation and a readiness of resources in financial questions which call for our unqualified admiration and at the same time furnish the reason why he was intrusted with a work of such importance. The time and amount of diligent and patient labour expended can only be appreciated to its full extent by those who have ever dealt with similar questions, but the author, we are sure, will not complain if we also accord a full share of the praise and commendation, due to him for his arduous labour, to H.E. Count Yamagata, at whose instance the task was commenced, and under whose auspices, we trust, it will be carried out. As a rule, those in distressed circumstances attribute the cause of their unfortunate position to circumstances and conditions beyond their control, without giving due consideration, if any, to the remedies and expedients that they themselves might apply. From a personal interview with Count Yamagata, although in connection with other matters, we infer that he believes this to be the case with the Japanese farmer, to some extent at least, and from the nature of the means proposed by Mr. Mayet it appears that Count Yamagata's intention is to render the Japanese farmer a permanent and the best possible of all services, that is to make him help himself, we say *make*, because a little mild compulsion may prove unavoidable, if not indispensable, and certainly justifiable, as in all cases of agricultural distress the Government is appealed to or assistance.

"The condition of the rural population" Mr. Mayet says, in an introductory letter to Count Yamagata, "has in recent years become very unsatisfactory, a fact which has become evident from occasional farmers' revolts, disputes between debtors and creditors, bankruptcies, compulsory sales of small farms in many districts, and petitions from large meetings of farmers to the Government for remission or reduction of ground taxes. The high ground tax which remains the same from year to year and has to be paid in coin has a crushing effect upon the farmer, as soon as the result of the multiplication of the two factors *saleable quantity of produce* and *selling price* falls below the average assumed at the revision of the ground taxes. Then the farmer gets into debt. He gets credit, but only for a short time, and that at a high rate of interest and without the facility of repaying by instalments, whilst the nature of agriculture requires credit for a lengthened period and at a low rate of interest, with repayment on an easy scale. Thus for the want of institutions that would give him such credit, the farmer falls into the hands of usurers."

Incidents illustrating the above facts have appeared in the local papers in numbers more than sufficient to cause us to accept them without question....
...To rescue the farming classes from the grasp of usurers, the author advocates the enforcement of the law of the 11th September, 1877, which limits the rate of interest, but at present is a dead letter and constantly infringed, and is

of little benefit to the debtor. We presume that there are no penalties attached to offences against this law; so that it is not surprising if it has become a dead letter, for in Japan the observance of a law to which no penalty is attached is entirely optional—we assert this on good authority—and hence offences against any such law would not even admit the remedy of a civil suit on the part of any one suffering from its infringement. According to the law in question, only such debts as arise on loans of any sum not exceeding 100 yen at a rate of interest above 20 per cent.; from 100 to 1,000 yen, at over 15 per cent., and of over 1,000 yen at above 12 per cent., are to be reduced by the Court. A remedy is thus offered which few will care to avail themselves of; since by so doing they would only irritate their creditors, and at the best, that is if they carry their point, they would still remain in their creditors' hands for the original loan and interest due thereon, at the lawful rate of interest of 12, 15 or 20 per cent., according to the amount of the loan.

The remedy Mr. Mayet proposes is to give the creditor interest bearing bonds in lieu of his loan; these bonds to be issued by an institution to which the debtors of several creditors would then become debtors and pay their instalments and interest, so that short-termed debts at a high rate of interest would be converted into fixed debts for longer terms, at a lower rate of interest and repayable in instalments. At the first glance a scheme of this kind would

appear to be difficult of realization, principally from the avarice of usurious creditors, but the author has foreseen and provided for these difficulties in section 72, dealing with the details of "The amortization of agricultural mortgage debts." Savings and Real Estate Credit Banks are proposed to be established, to advance money on mortgages up to half of the assessed ground tax value, and in all cases in which the amount of the mortgage is within this limit, the bank could without any difficulty take the place of the former creditor and its bonds would be negotiable in the money market the same as any other bonds, and the original creditor could either take his money or the interest bearing bond. The financial ability of the author has also devised a safe way for taking up the excess of mortgages over half of the tax value by means of second and third class bonds. As entering into the details of the plan could only be of interest to financiers, we shall limit ourselves to saying that the few obstacles that might be encountered in the beginning would soon be overcome and give place to unqualified and permanent benefits to the agricultural classes. The conversion of the pensions of the *shisoku* into pension bonds, which was very similar to what is proposed, has been so successfully carried out by the government that the success of Mr. Mayet's plans can hardly be questioned, and in view of their much wider range and more pressing importance, *preparations for their execution cannot be made too soon. Every day of*

delay means a day of sorrow and suffering to millions of hard-working Japanese.

The total amount of mortgages on rural ground and houses in the whole of Japan in 1886 was estimated at 150,000,000 yen, so that this immense sum after the establishment of agricultural credit banks, instead of the present average of 15 per cent., would pay only 6 per cent. The difference of 9 per cent means *the relief of Japanese farmers from an annual drain of 13½ million yen.* In 1881 the entire mortgages in rural ground and houses amounted to 141 million yen, so that the increase of 9 million in five years shows this burden to be an annually growing one. The above 13½ million yen amount to about one-third of the ground tax. If ever figures spoke or sounded a note of warning, these figures do.

Next the insurance of the various kinds of farming property such as houses, cattle, harvest, implements, etc., are taken under consideration and treated with the same *convincing clearness and simplicity that form a distinguishing feature of the whole work.* In fact one cannot help becoming thoroughly interested in all these plans which join one another in such logical sequence that one seems to be the necessary result of the other, and an indispensable part of the whole....

Returning to the liberation of the farmer from the grasp of the usurer, Mr. Mayet happily and pithily describes the situation and its consequences in the adaptation of a quotation from Quesnay

(physician to Louis XV, known by his efforts to ameliorate the lot of farmers, and as an eminent writer on political economy). Quesnay said: "A poor farmer, a poor country; a poor country, a poor king." Mr. Mayet adapting this to Japan says: A poor farmer, a poor country; a poor country, a weak country! Why, of course, say the wiseacres, everybody knows that. We would remind them of the story of the egg of Columbus. If the hundreds and thousands of columns that have been wasted upon questions connected with treaty revision—the tariff question excepted—had taken those few words, or words similar in import, for a heading, and discussed them with a view to make them no longer applicable to Japan, the questions now brought to the surface by a foreign friend of Japan in the work under consideration, would be much nearer to their solution than they are at present. It is high time that the press of Japan, instead of blowing gaudy political bubbles, took up practical aims of this kind, not only here and there in isolated instances, from sheer weariness, or in search of a harmless topic, but thoroughly imbued with their importance and clearly understanding their bearing upon all questions at issue, whether internal or international. The work under review, a stout volume of 450 pages, furnishes so many topics for discussion that we have had to limit ourselves to the barest outlines of a few of the points that seem to us to be of the most importance. *The colonisation of the Hokkaidō* in connection with the Land Credit Ban¹

(Boden Credit Anstalt) proposed by Mr. Mayet, and according to his system, is *represented in an entirely new light*, and if time permits we shall treat of this in the future. For the present we shall only say that as power has moved northward in Europe and America, so it will and must move northward in Japan; geographically the head of the country the Hokkaidō will, in the course of time, become its political head also, an opinion which is shared

with us by men of influence and position.

In taking regretful leave of a work that we have perused with glowing interest we express the hope that it may appear in an English and especially in a Japanese translation, and that either the whole or judiciously selected and distributed portions of it may be made accessible to the *largest possible circle of readers, and thus bear good and wholesome fruit.*

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Japanese Finance Department.

Read before the "Deutsche Gesellschaft fuer Natur- und
Völkerkunde Ostasiens" in Tokyo on the
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1878. Gr. 8°. 33. pp. 1s. 6d.

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The Same in Japanese, translated by Y. Terada.

1878. 8°. pp. 47. 1 Mark 50. pf.

THE NATIONAL DEBT OF JAPAN.

Two Lectures delivered before the "Deutsche Gesellschaft für Natur- und
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Okurasho Komon (Counsellor to the Imperial Japanese Finance Department)

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The Same in Japanese Translation published by the
Imperial Japanese Ministry of Finance.

Tokyo, 1880. 8° pp. 167. 3 Mark.

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TRANSLATED BY

N. OMURA.

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DAI NIPPON KYOIKU KWAI (Educational Society of Japan)
Tokyo. 1886. large 8°. pp. 300. 3 mark.

JAPANISCHE BEVÖLKERUNGSSTATISTIK.

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